GRUNDIG electronic	Professioneller Videogenerator Professional Video Generator VG 1100	40214-942.11
Datum/Date 06/92		Deutsch English

Schaltbildsatz/Oscillogrammme - Circuit diagrams/Oscillograms

Inhaltsübersicht/Contents		Seite/Page
Gesamtschaltplan Wiring Diagram		1a-1d
Bedienteil Control Board	MCB 50	2
Trafomodul Transformer Modul	MCS 51	3
Netzteil Power Supply	MCS 50	4
YUV-Speicher-Baustein YUV-Memory-Circuit	MCM 50	5a-5d
Ablaufsteuerung Sequence Control	MCP 50	6a-6d
µP-Baustein µP-Circuit	MCP 51	7a-7d
Softwarekennung Softwarekey	MCP 53	8
Multiburst-Baustein Multiburst-Circuit	MCO 50	9a-9e
Taktgeber-Baustein Clock Generator	MCT 50	10a-10f
Video-Baustein Video Circuit	MCV 50	11a-11k
Farbbaustein PAL Color Circuit PAL	MCC 50	12a-12d
Impuls-Endstufen-Baustein Pulse Output Circuit	MCI 51	13a-13d
Optionen / Options:		
Farbbaustein SECAM Color Circuit SECAM	MCC 51	14a-14b
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Datenzeilen-Codierer Dataline Encoder	MCD 52	16
DCF 77 Synchronisation Radio Synchronized Clock (DCF 77)	MCP 52	17
Komponenten Y, C_B, C_R Components Y, C_B, C_R	MCV 52	18a-18n
IEEE 488 IEEE 488	MCI 52	19

Änderungen und Irrtümer vorbehalten. Alterations reserved. © GRUNDIG-AG, Geschäftsbereich Industrieelektronik

MCI52
IEC -BUS BAUSTEIN
IEC-BUS CIRCUIT

zur MCI52

zur MCP51

MCS51
TRAFOBAUSTEIN
TRANSFORMER CIRCUIT

240
220
110

MCM50
YUV-SPEICHER BAUSTEIN
YUV-MEMORY CIRCUIT

MCP50
ABLAUFSTEUERUNG
PROCESS-CONTROL CIRCUIT

MCP51
µP - BAUSTEIN
µP - CIRCUIT

MCO50
MULTIBURST BAUSTEIN
MULTIBURST CIRCUIT

S891 S841 S781 S771 S741 S721

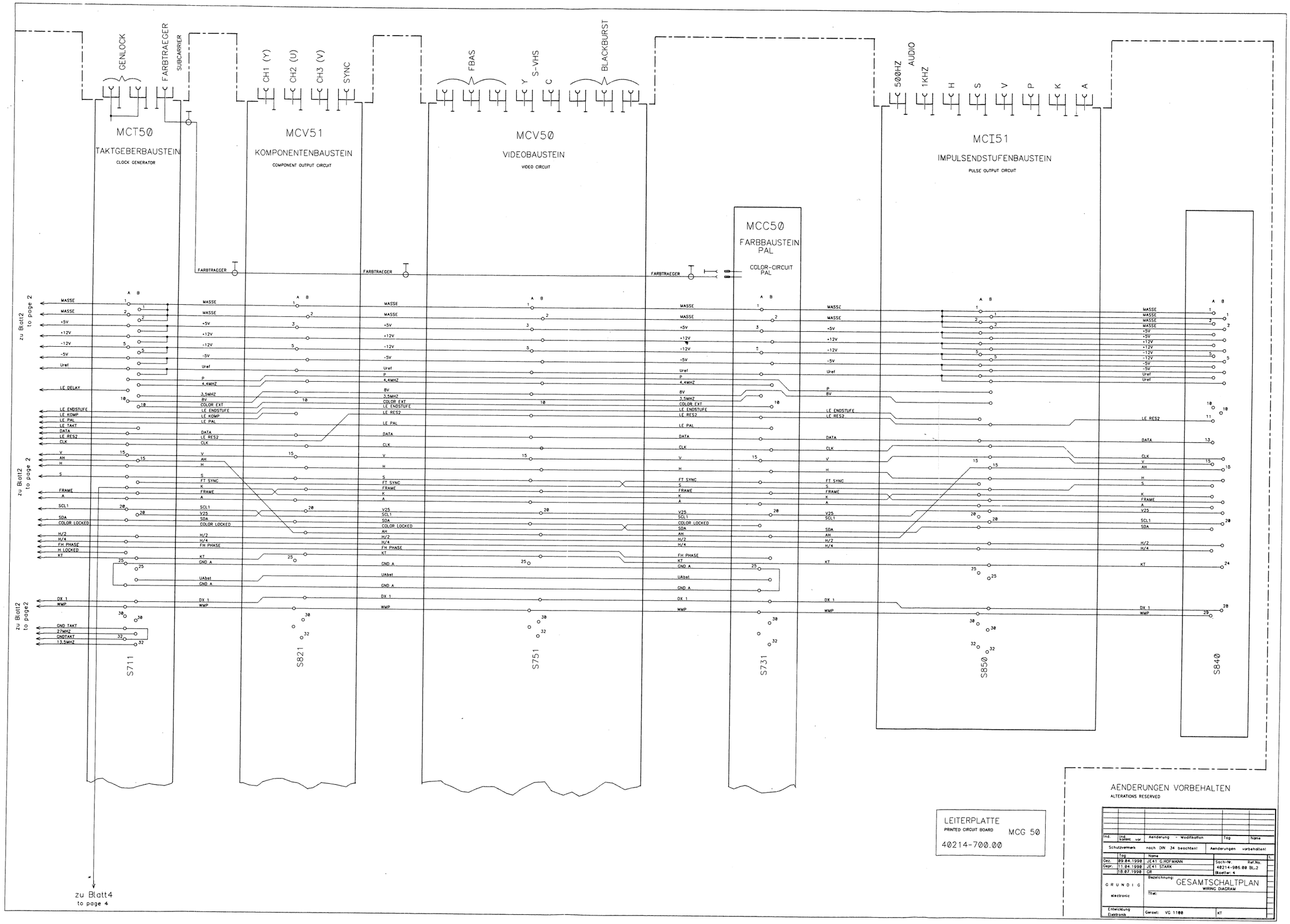
zu Blatt 3

zu Blatt 3

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

LEITERPLATTE
PRINTED CIRCUIT BOARD
MCG 50
40214-700.00

Ind.	Ind. kommt vor	Aenderung - Modifikation		Tag	Name
Schutzvermerk		noch DIN 34 beachten!		Aenderungen vorbehalten!	
	Tag	Name			
Gez.	09.04.1998	JE41 G.HOFMANN		Sach-Nr.	Ref.No.
Gepr.	11.04.1998	JE41 STARK		40214-986.00 BL.1	
	18.07.1998	GR		Blatter: 4	
GRUNDIG electronic		Bezeichnung: GESAMTSCHALTPLAN WIRING DIAGRAMM			
Entwicklung Elektronik		Titel:			
		Gerat: VC 1100		KT	


GENLOCK
FARBTRAEGER
SUBCARRIER
CH1 (Y)
CH2 (U)
CH3 (V)
SYNC
FBAS
Y
S-VHS
C
BLACKBURST
500HZ
AUDIO
1KHZ
H
S
V
P
K
A
MCT50
TAKTGEBERBAUSTEIN
CLOCK GENERATOR
MCV51
KOMPONENTENBAUSTEIN
COMPONENT OUTPUT CIRCUIT
MCV50
VIDEOBAUSTEIN
VIDEO CIRCUIT
MCC50
FARBBAUSTEIN PAL
COLOR-CIRCUIT PAL
MCI51
IMPULSENDSTUFENBAUSTEIN
PULSE OUTPUT CIRCUIT
FARBTRAEGER
zu Blatt2
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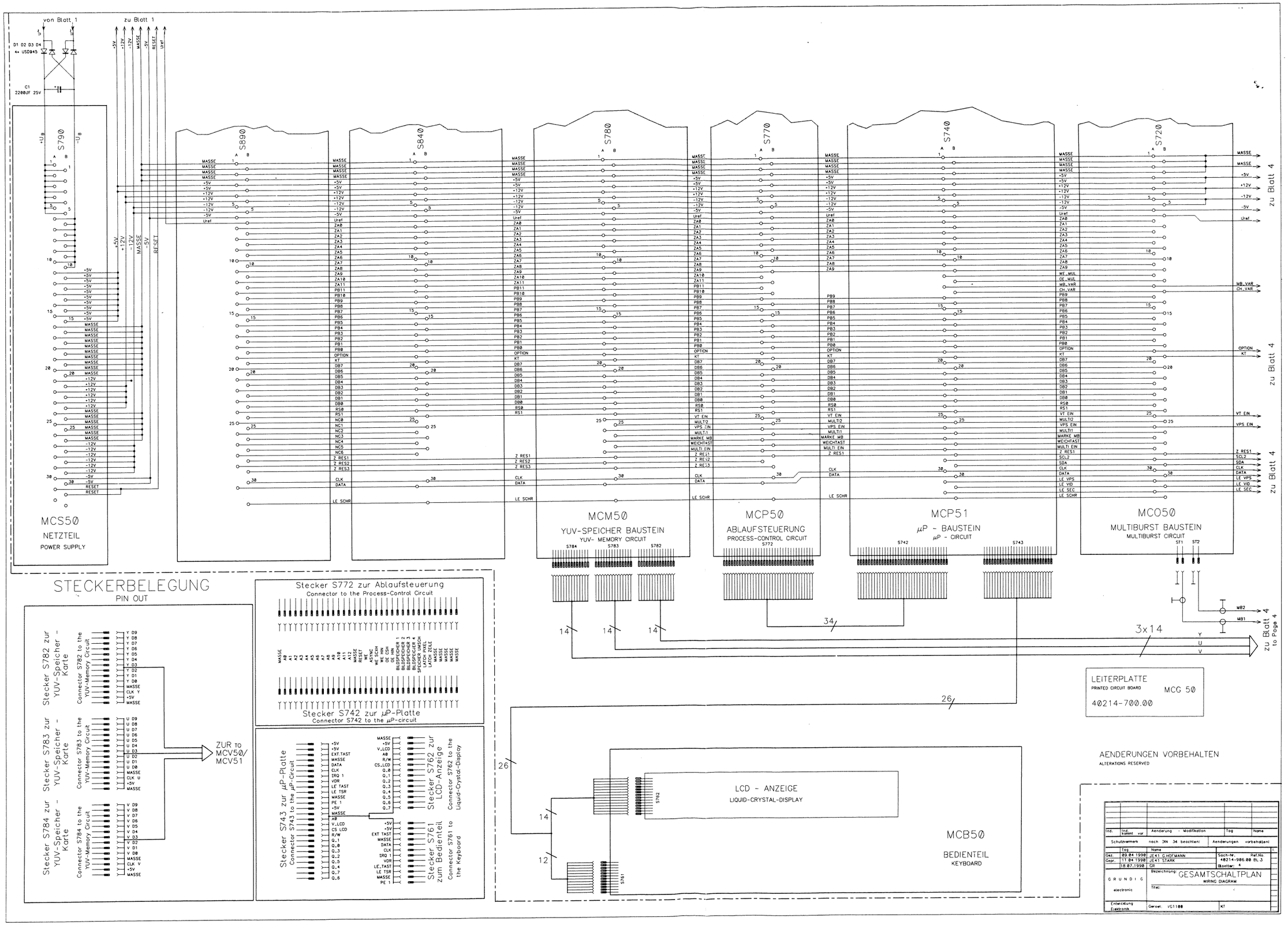
zu Blatt2
to page 2
zu Blatt2
to page2
MASSE
+5V
+12V
-12V
-5V
Uref
LE DELAY
LE ENDSTUFE
LE KOMP
LE PAL
LE TAKT
DATA
LE RES2
CLK
V
AH
H
S
FRAME
A
SCL1
SDA
COLOR LOCKED
H/2
H/4
FH PHASE
H LOCKED
KT
GND TAKT
27MHZ
GNDTAKT
13,5MHZ
P
4,4MHZ
3,5MHZ
BV
COLOR EXT
LE RES2
LE PAL
FT SYNC
K
FRAME
V25
GND A
UAbst
DX 1
WMP
S711
S821
S751
S731
S850
S840
zu Blatt4
to page 4
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCG 50
40214-700.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
Ind.
Ind. kommt vor
Aenderung - Modifikation
Tag
Name
Schutzvermerk nach DIN 34 beachten!
Aenderungen vorbehalten!
Gez. 09.04.1998 JE41 G.HOFMANN
Gepr. 11.04.1998 JE41 STARK
18.07.1998 GR
Sach-Nr. 40214-986.00 Bl.2
Ref.No.
Boetter: 4
GRUNDIG electronic
Bezeichnung: GESAMTSCHALTPLAN
WIRING DIAGRAM
Titel:
Entwicklung Elektronik
Gerael: VC 1188
KT

1b


von Blatt 1
zu Blatt 1
D1 D2 D3 D4
4x USD945
C1
2200UF 25V
S790
S890
S840
S780
S770
S740
S720
MCS50
NETZTEIL
POWER SUPPLY
MCM50
YUV-SPEICHER BAUSTEIN
YUV- MEMORY CIRCUIT
MCP50
ABLAUFSTEUERUNG
PROCESS-CONTROL CIRCUIT
MCP51
µP - BAUSTEIN
µP - CIRCUIT
MCO50
MULTIBURST BAUSTEIN
MULTIBURST CIRCUIT
zu Blatt 4
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zu Blatt 4
zu Blatt 4
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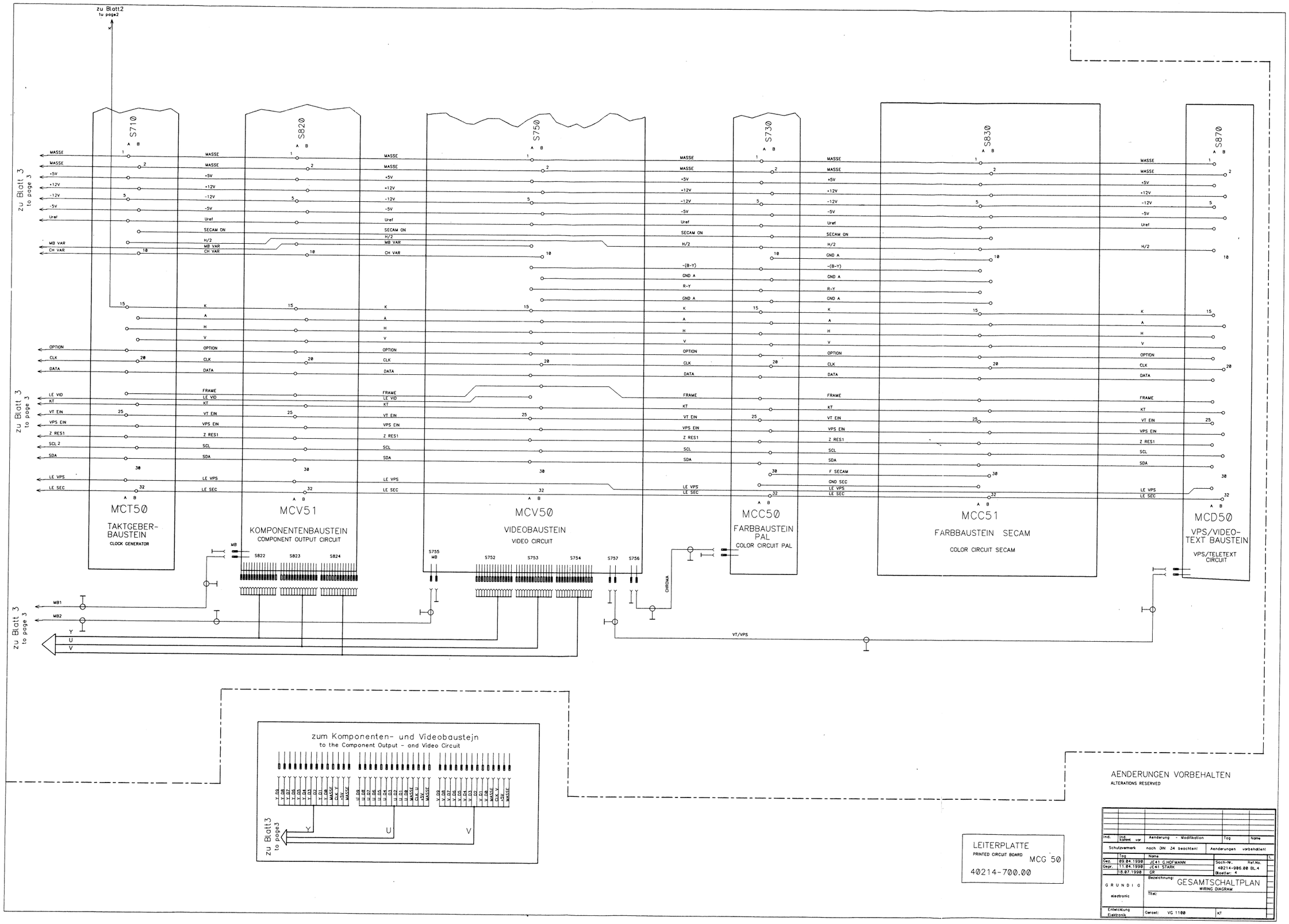
STECKERBELEGUNG
PIN OUT
Stecker S782 zur YUV-Speicher - Karte
Connector S782 to the YUV-Memory Circuit
Stecker S783 zur YUV-Speicher - Karte
Connector S783 to the YUV-Memory Circuit
Stecker S784 zur YUV-Speicher - Karte
Connector S784 to the YUV-Memory Circuit
ZUR TO MCV50/ MCV51
Stecker S772 zur Ablaufsteuerung
Connector to the Process-Control Circuit
Stecker S742 zur µP-Platte
Connector S742 to the µP-circuit
Stecker S743 zur µP-Platte
Connector S743 to the µP-Circuit
Stecker S762 zur LCD-Anzeige
Connector S762 to the Liquid-Crystal-Display
Stecker S761 zum Bedienteil
Connector S761 to the Keyboard
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCG 50
40214-700.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
LCD - ANZEIGE
LIQUID-CRYSTAL-DISPLAY
MCB50
BEDIENTEIL
KEYBOARD
GRUNDIG
electronic
GESAMTSCHALTPLAN
WIRING DIAGRAM


zu Blatt2
to page2
zu Blatt 3
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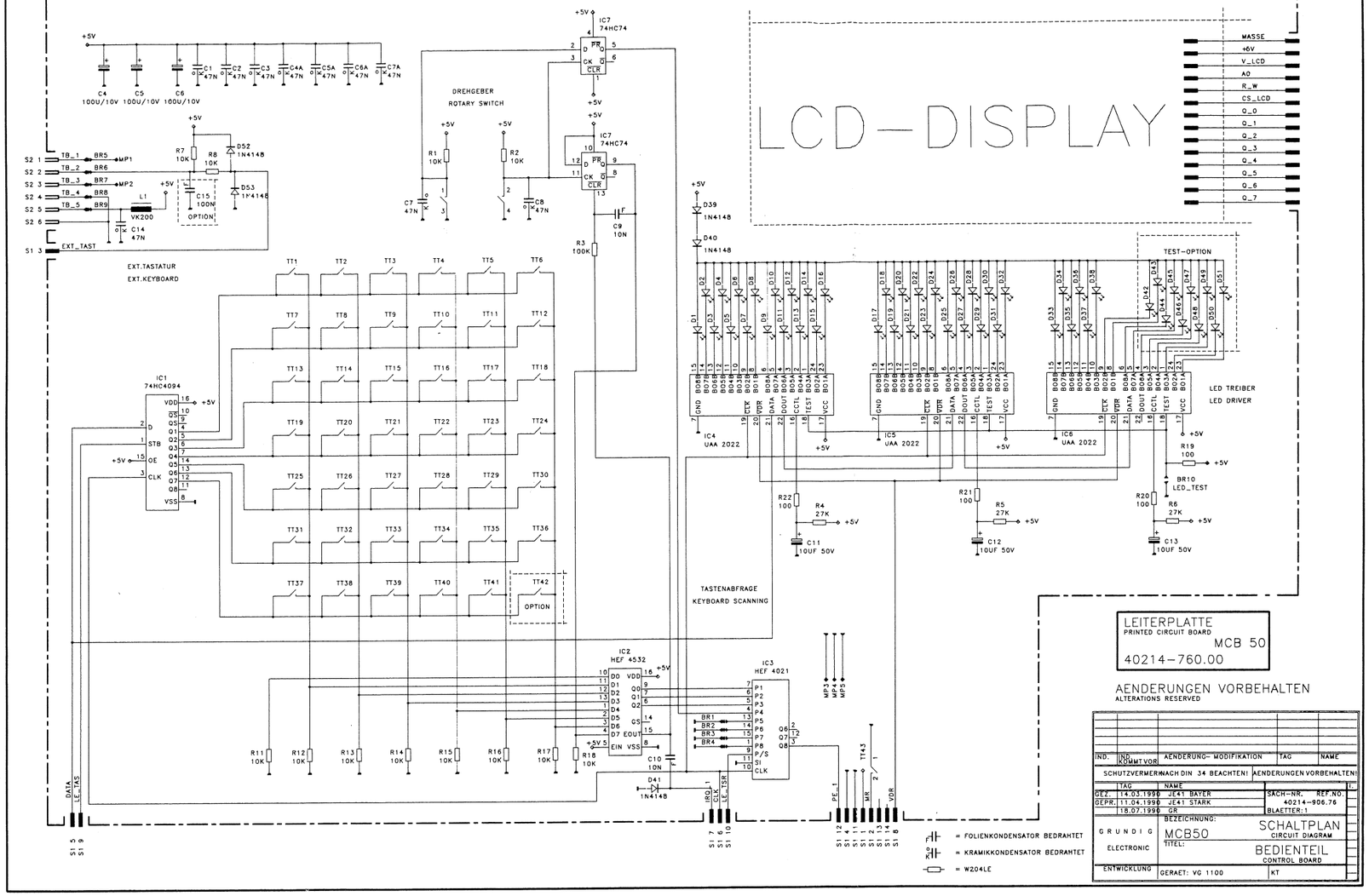
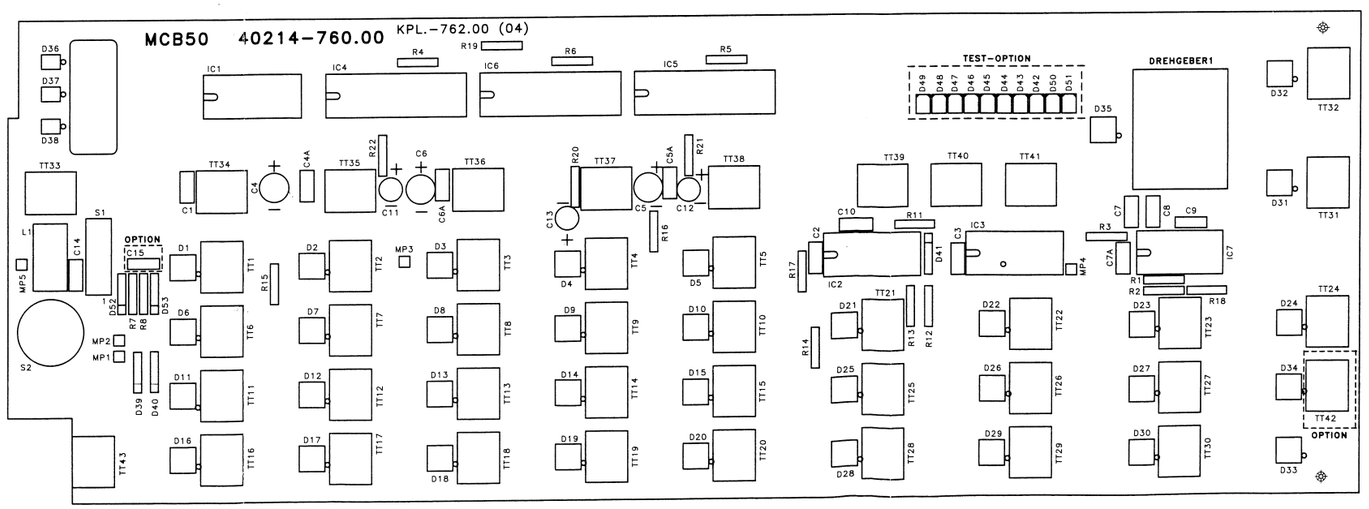
S710
S820
S750
S730
S830
S870
MCT50
TAKTGEBER-
BAUSTEIN
CLOCK GENERATOR
MCV51
KOMPONENTENBAUSTEIN
COMPONENT OUTPUT CIRCUIT
MCV50
VIDEOBAUSTEIN
VIDEO CIRCUIT
MCC50
FARBBAUSTEIN
PAL
COLOR CIRCUIT PAL
MCC51
FARBBAUSTEIN SECAM
COLOR CIRCUIT SECAM
MCD50
VPS/VIDEO-
TEXT BAUSTEIN
VPS/TELETEXT
CIRCUIT
MASSE
+5V
+12V
-12V
-5V
Uref
SECAM ON
H/2
MB VAR
CH VAR
-(B-Y)
GND A
R-Y
K
A
H
V
OPTION
CLK
DATA
FRAME
LE VID
KT
VT EIN
VPS EIN
Z RES1
SCL
SDA
F SECAM
GND SEC
LE VPS
LE SEC
MB1
MB2
Y
U
V
CHROMA
VT/VPS
zum Komponenten- und Videobaustejn
to the Component Output - and Video Circuit
zu Blatt3
to page3
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCG 50
40214-700.00
Ind.
Ind. kommt vor
Aenderung - Modifikation
Tag
Name
Schutzvermerk
nach DIN 34 beachten!
Aenderungen vorbehalten!
Gez.
09.04.1990
JE41 G.HOFMANN
Gepr.
11.04.1990
JE41 STARK
18.07.1990
GR
Sach-Nr.
Ref.No.
40214-906.00 BL.4
Bloetter: 4
GRUNDIG
electronic
Bezeichnung:
GESAMTSCHALTPLAN
WIRING DIAGRAM
Titel:
Entwicklung
Elektronik
Geraet: VG 1100
KT


LCD-DISPLAY
DREHGEBER
ROTARY SWITCH
EXT.TASTATUR
EXT.KEYBOARD
TASTENABFRAGE
KEYBOARD SCANNING
LED TREIBER
LED DRIVER
TEST-OPTION
OPTION
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCB 50
40214-760.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
= FOLIENKONDENSATOR BEDRAHTET
= KRAMIKKONDENSATOR BEDRAHTET
= W204LE
SCHALTPLAN
CIRCUIT DIAGRAM
BEDIENTEIL
CONTROL BOARD
GRUNDIG
ELECTRONIC
MCB50
GERAET: VG 1100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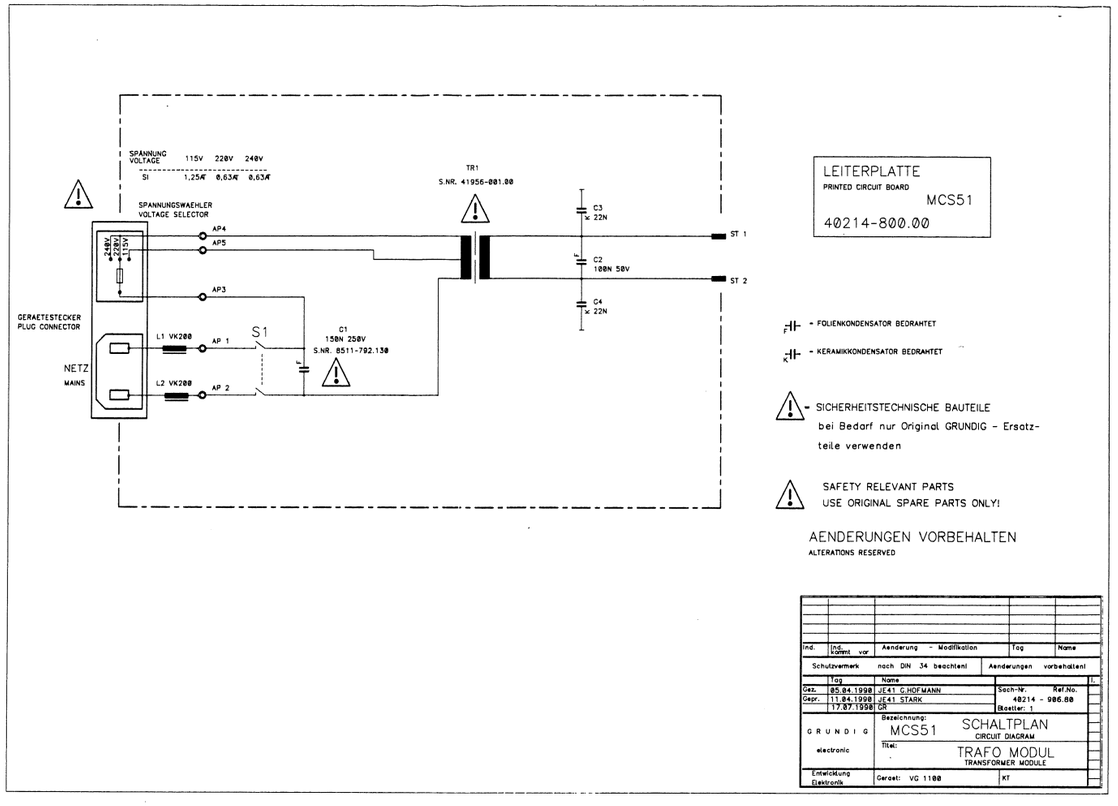
TEST-OPTION
DREHGEBER1
OPTION



LEITERPLATTE
PRINTED CIRCUIT BOARD
MCS51
40214-800.00

F - FOLIENKONDENSATOR BEDRAHTET

K - KERAMIKKONDENSATOR BEDRAHTET

⚠ - SICHERHEITSTECHNISCHE BAUTEILE
bei Bedarf nur Original GRUNDIG - Ersatzteile verwenden

⚠ SAFETY RELEVANT PARTS
USE ORIGINAL SPARE PARTS ONLY!

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name

Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!

	Tag	Name
Gez.	05.04.1998	JE41 G.HOFMANN
Gepr.	11.04.1998	JE41 STARK
	17.07.1998	GR

Sach-Nr. 40214 - 986.00 Ref.No.
Bestell. 1

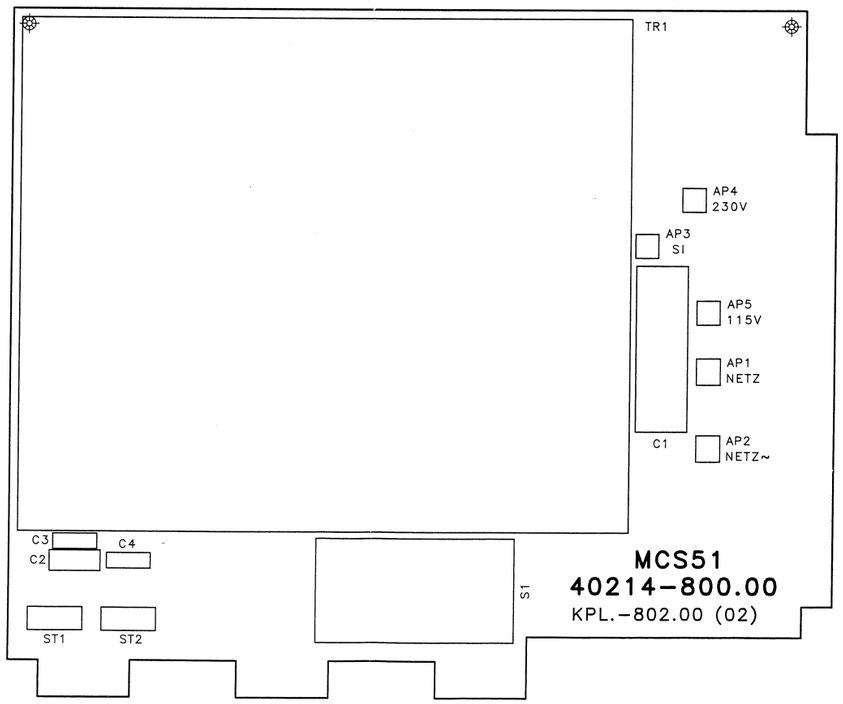
GRUNDIG electronic

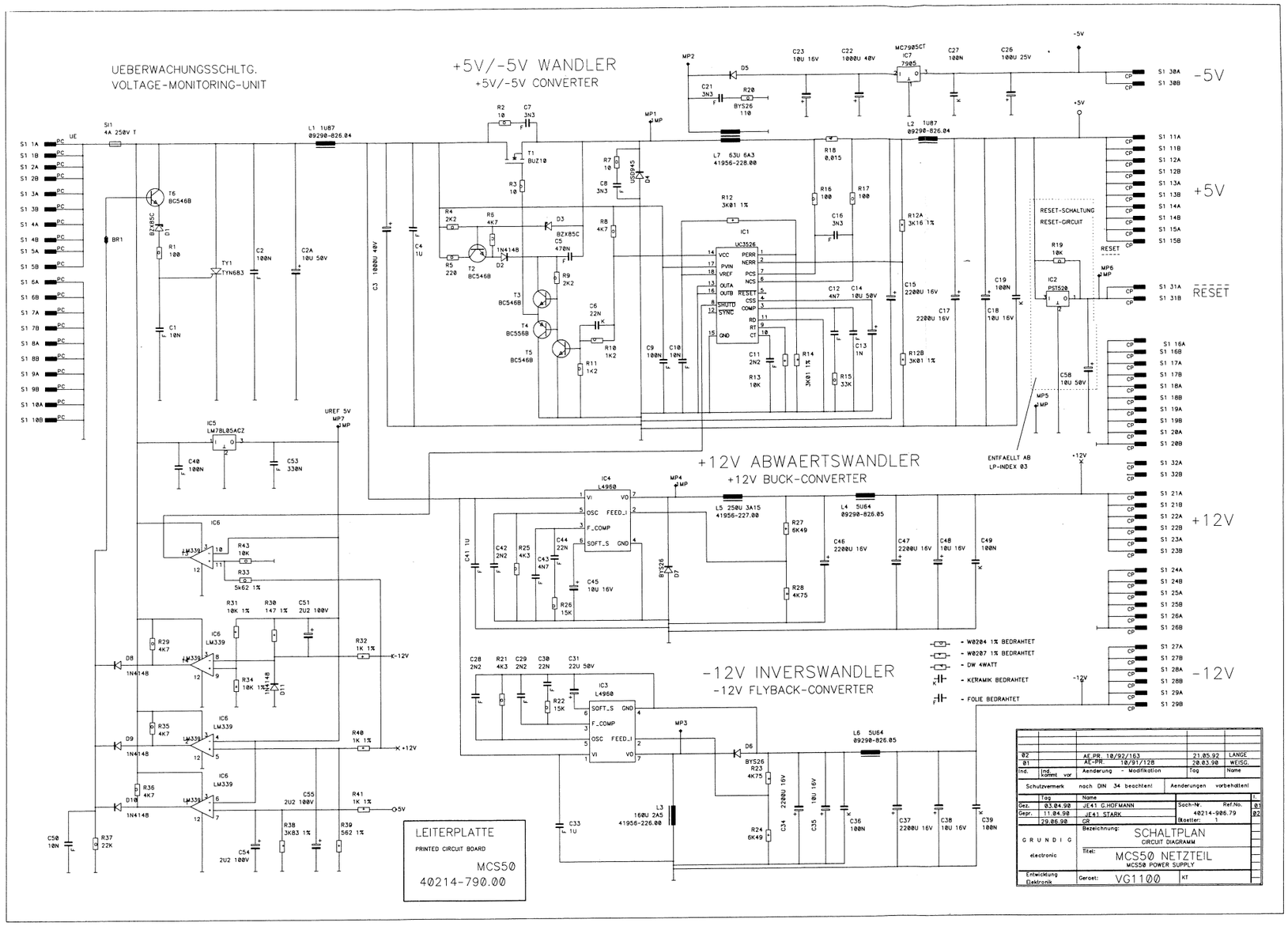
Bezeichnung: MCS51 SCHALTPLAN / CIRCUIT DIAGRAM

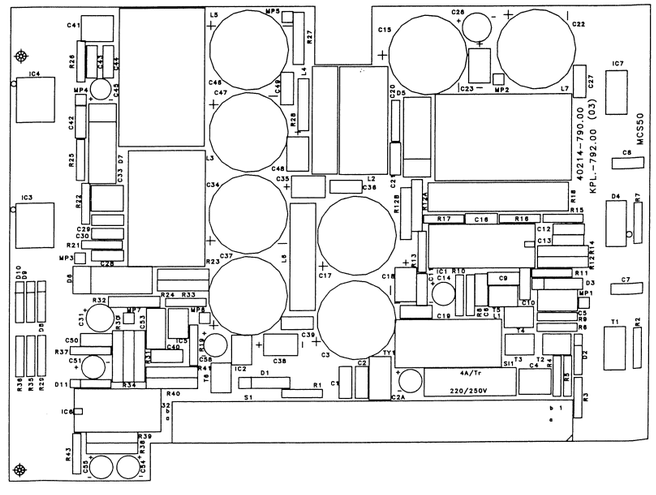
Titel: TRAFO MODUL / TRANSFORMER MODULE

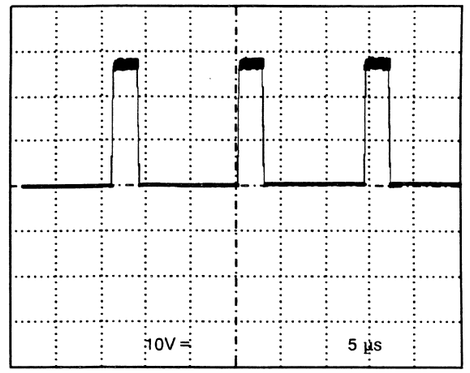
Entwicklung Elektronik

Geraet: VG 1100 KT









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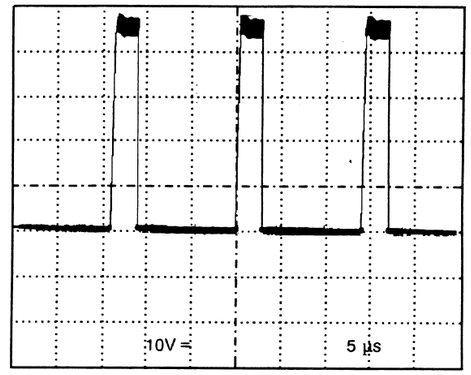

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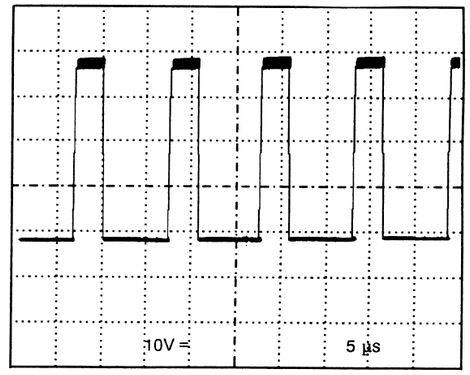

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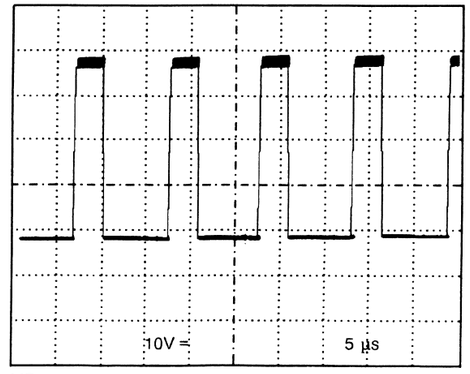

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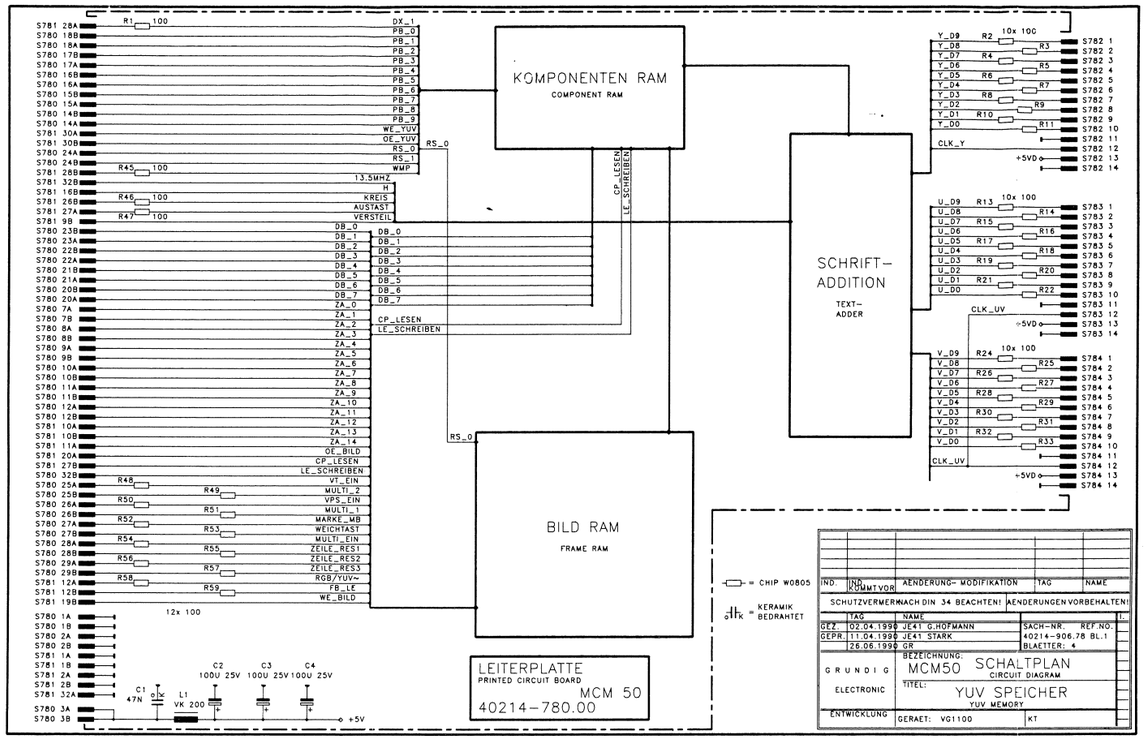
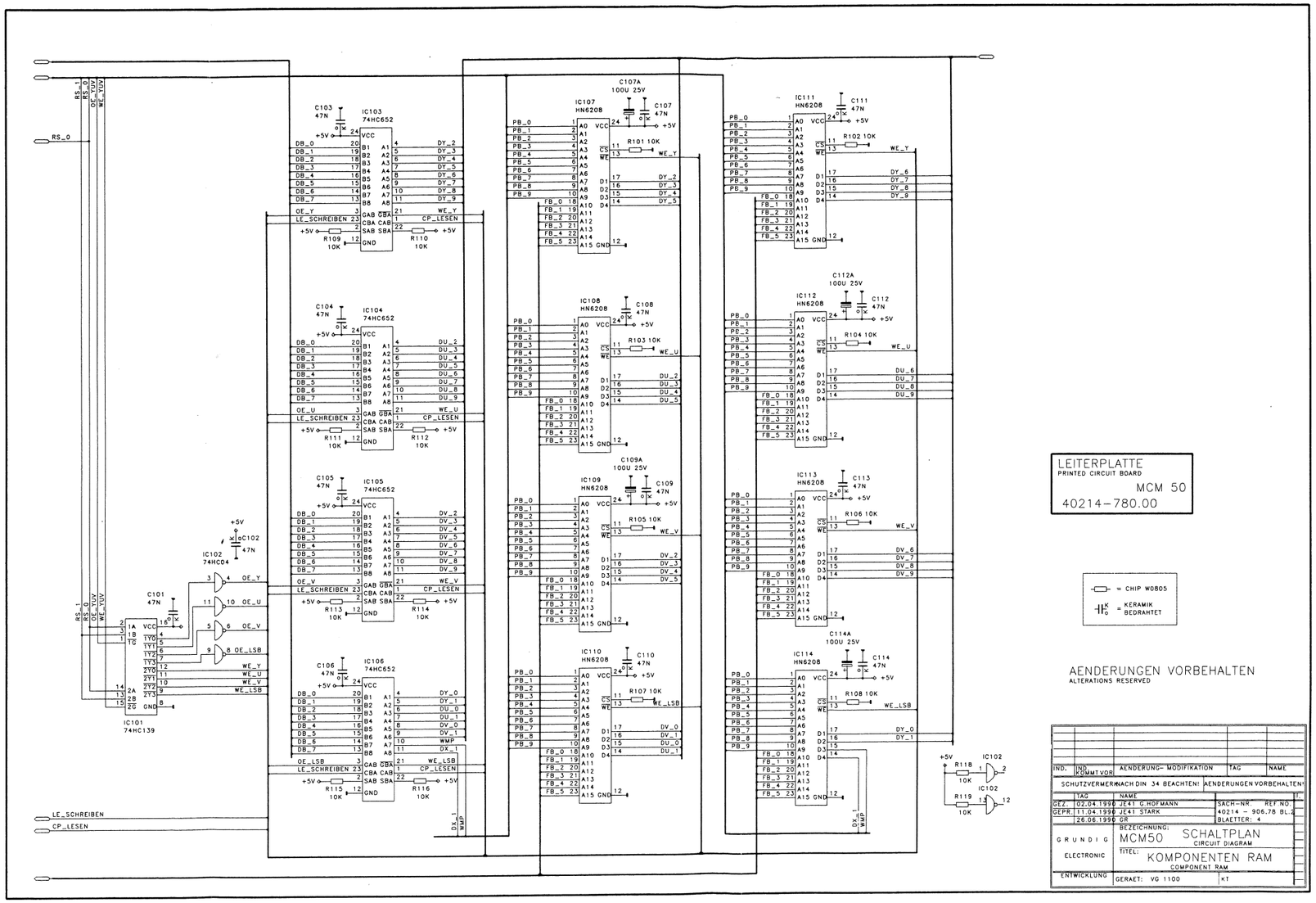
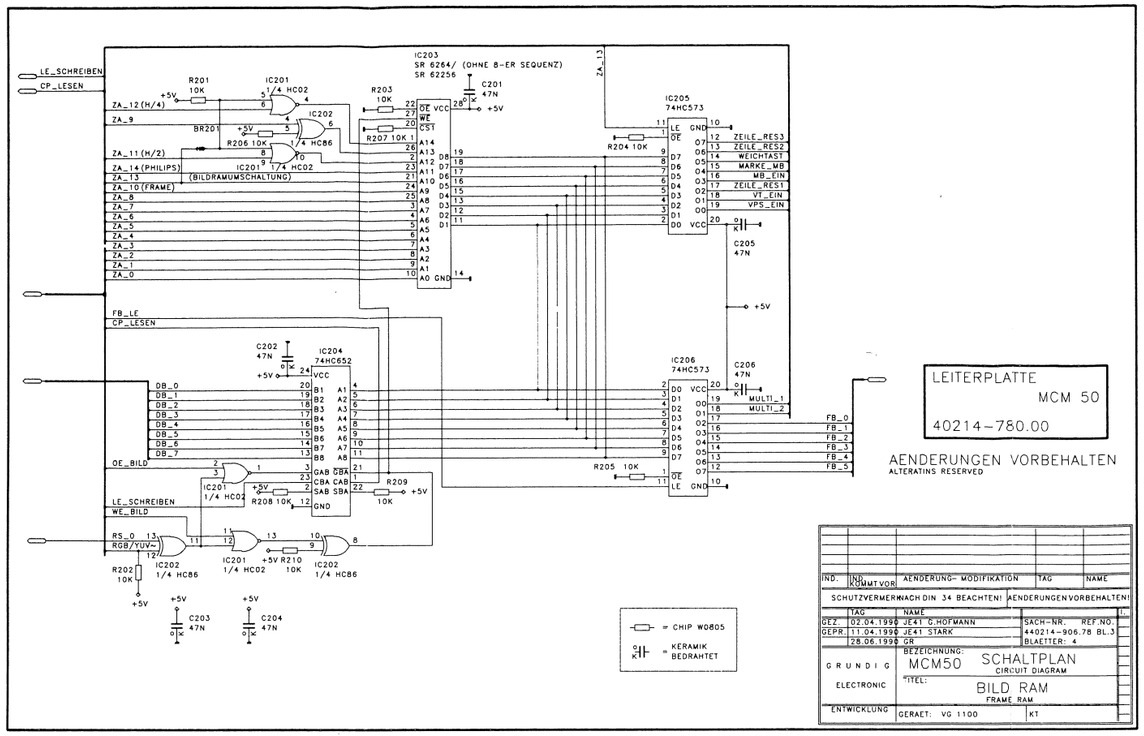
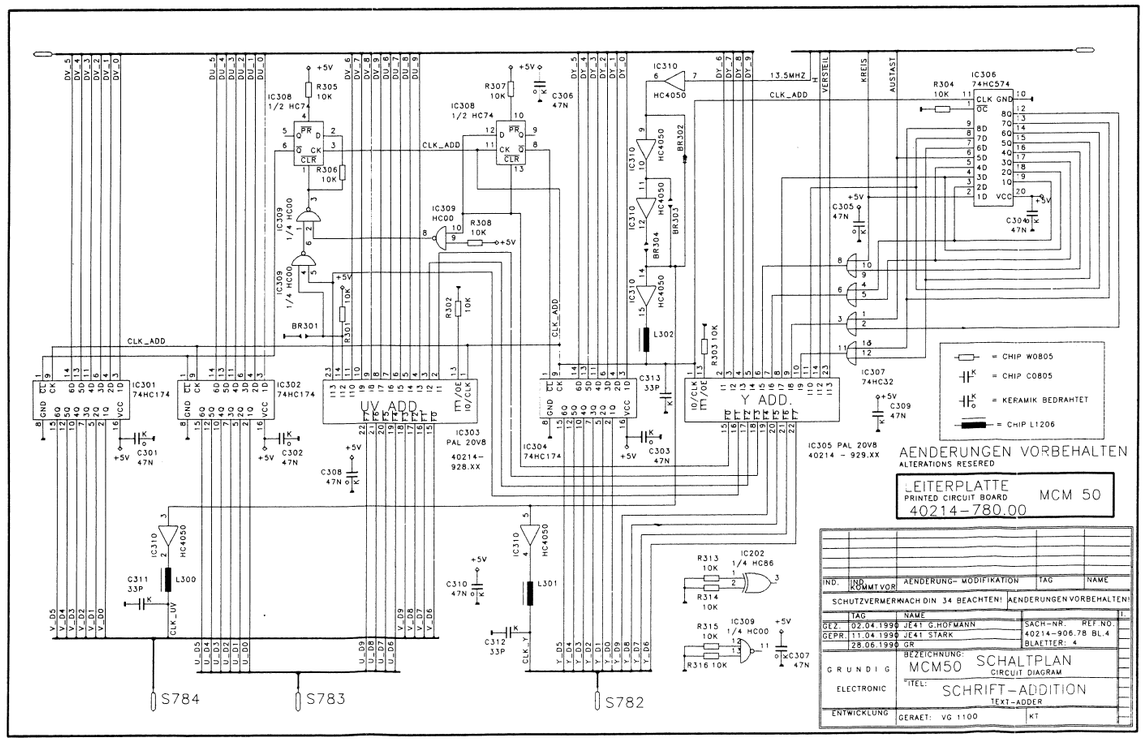

KOMPONENTEN RAM
COMPONENT RAM
SCHRIFT–
ADDITION
TEXT–
ADDER
BILD RAM
FRAME RAM
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCM 50
40214–780.00
= CHIP W0805
= KERAMIK BEDRAHTET
SCHUTZVERMERK NACH DIN 34 BEACHTEN! ÄNDERUNGEN VORBEHALTEN!
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCM50 SCHALTPLAN CIRCUIT DIAGRAM
TITEL: YUV SPEICHER YUV MEMORY
GERÄT: VG1100 KT
SACH–NR. 40214–906.78 BL.1
BLÄTTER: 4

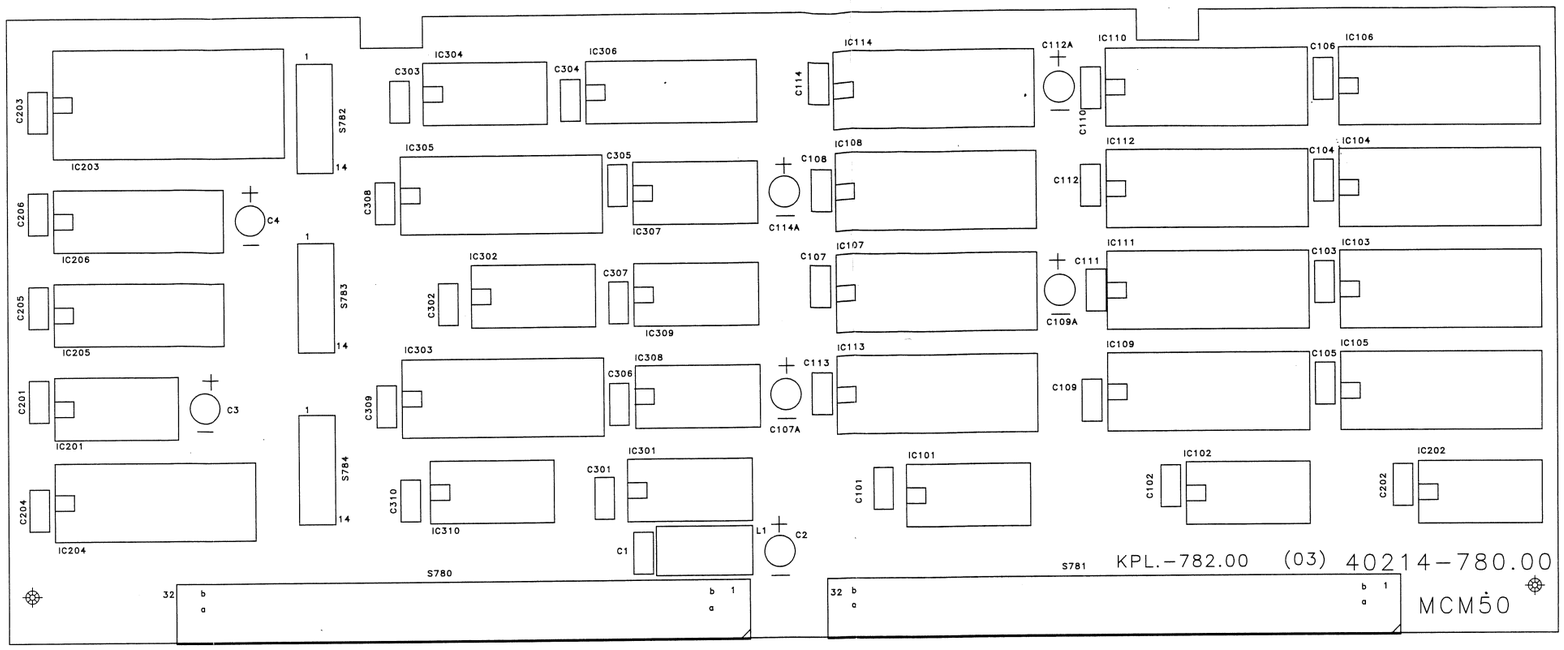


LEITERPLATTE
PRINTED CIRCUIT BOARD
MCM 50
40214-780.00
= CHIP W0805
= KERAMIK BEDRAHTET
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
IND. | IND. KOMMT VOR | AENDERUNG- MODIFIKATION | TAG | NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!
TAG | NAME
GEZ. 02.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
26.06.1990 GR
SACH-NR. REF NO.
40214 - 906.78 BL.2
BLAETTER: 4
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCM50 SCHALTPLAN
CIRCUIT DIAGRAM
TITEL: KOMPONENTEN RAM
COMPONENT RAM
ENTWICKLUNG
GERAET: VG 1100
KT

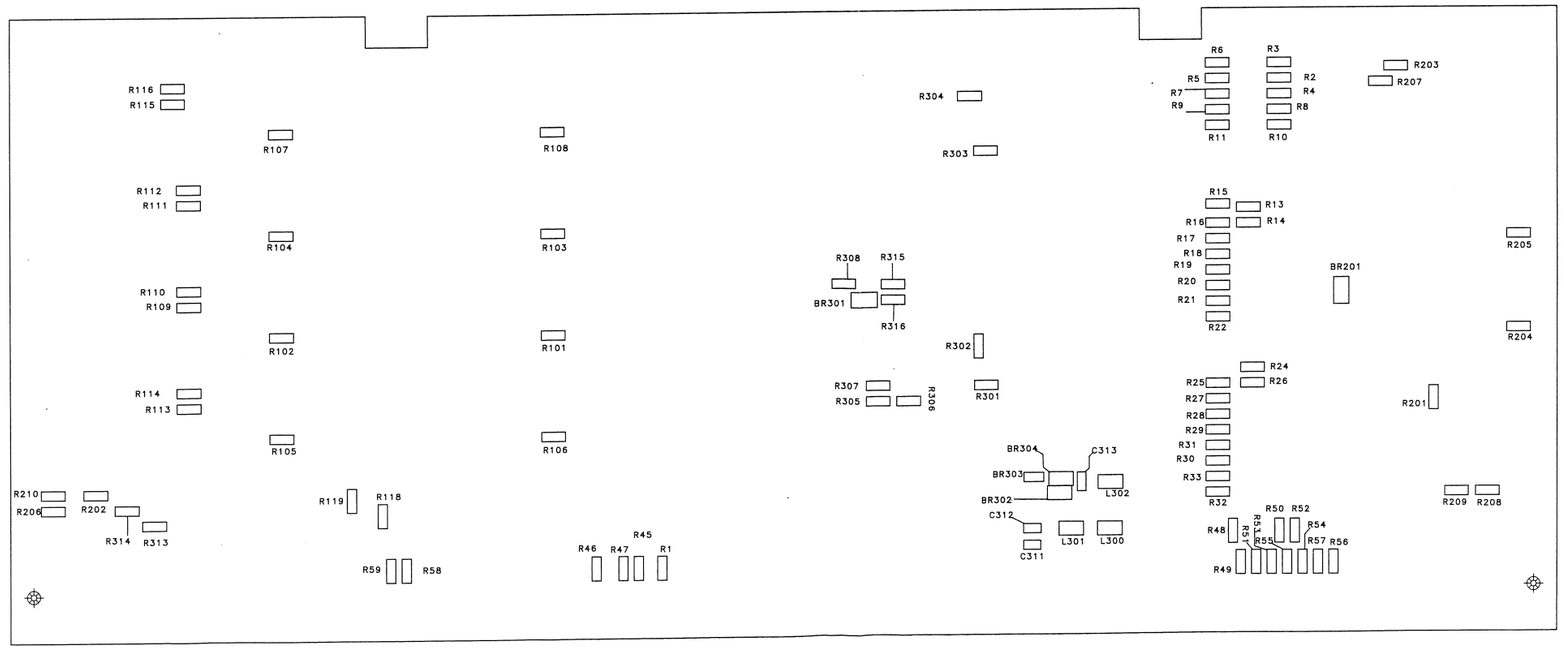

IC203
SR 6264/ (OHNE 8-ER SEQUENZ)
SR 62256
IC205
74HC573
IC206
74HC573
IC204
74HC652
IC201
1/4 HC02
IC202
1/4 HC86
R201 10K
R203 10K
R204 10K
R205 10K
R206 10K
R207 10K
R208 10K
R209 10K
R210 10K
C201 47N
C202 47N
C203 47N
C204 47N
C205 47N
C206 47N
LE_SCHREIBEN
CP_LESEN
FB_LE
OE_BILD
WE_BILD
RS_0
RGB/YUV
(BILDRAUMUMSCHALTUNG)
MULTI_1
MULTI_2
= CHIP W0805
= KERAMIK BEDRAHTET
LEITERPLATTE
MCM 50
40214-780.00
AENDERUNGEN VORBEHALTEN
ALTERATINS RESERVED
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!
GEZ. 02.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
28.06.1990 GR
SACH-NR. 40214-906.78 BL.3
BLAETTER: 4
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCM50 SCHALTPLAN
CIRCUIT DIAGRAM
TITEL: BILD RAM
FRAME RAM
ENTWICKLUNG
GERAET: VG 1100


IC308
1/2 HC74
IC309
HC00
IC310
HC4050
IC301
74HC174
IC302
74HC174
IC304
74HC174
IC303
PAL 20V8
40214-928.XX
IC305 PAL 20V8
40214 - 929.XX
IC307
74HC32
IC306
74HC574
R305 10K
R306 10K
R307 10K
R308 10K
R309 10K
R302 10K
R303 10K
R304 10K
C301 47N
C302 47N
C303 47N
C305 47N
C306 47N
C307 47N
C308 47N
C309 47N
C310 47N
C311 33P
C312 33P
C313 33P
L300
L301
L302
BR301
BR302
BR303
BR304
CLK_ADD
13.5MHZ
UV ADD.
Y ADD.
S784
S783
S782
= CHIP W0805
= CHIP C0805
= KERAMIK BEDRAHTET
= ChIP L1206
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERED
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCM 50
40214-780.00
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!
GEZ. 02.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
28.06.1990 GR
SACH-NR. 40214-906.78 BL.4
BLAETTER: 4
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCM50 SCHALTPLAN
CIRCUIT DIAGRAM
TITEL: SCHRIFT-ADDITION
TEXT-ADDER
ENTWICKLUNG
GERAET: VG 1100

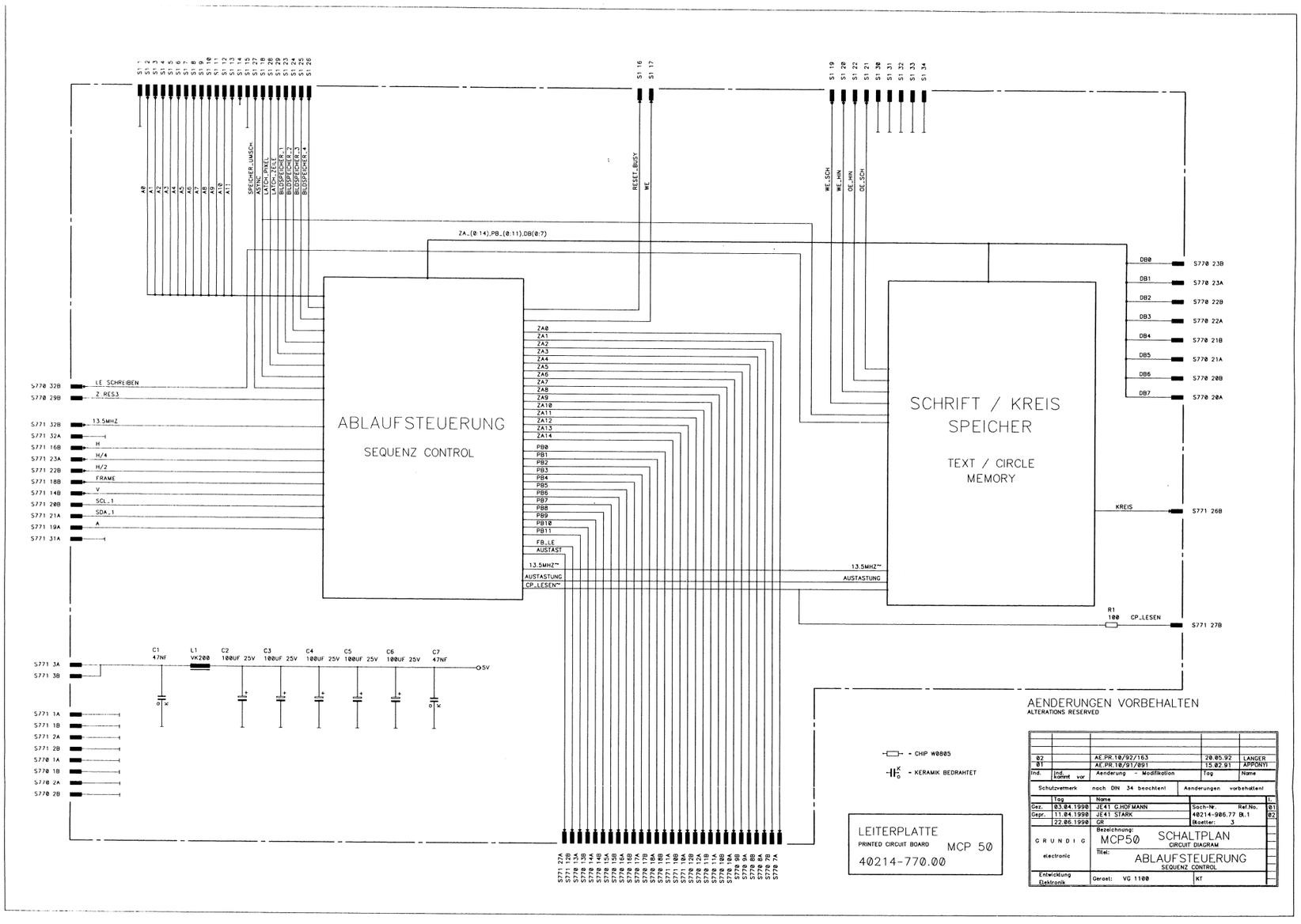
5c

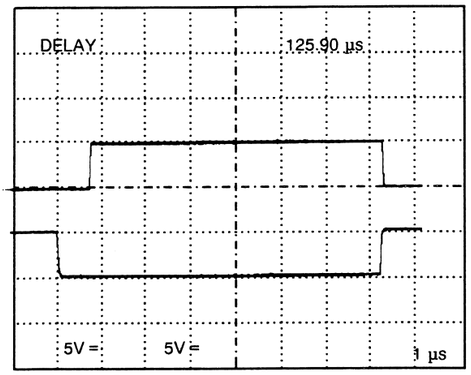


Bestückungsseite / Component side

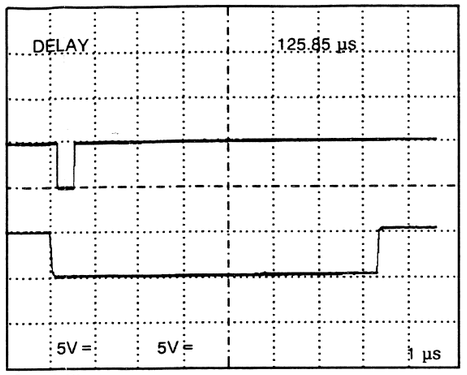


Lötseite / Soldering side

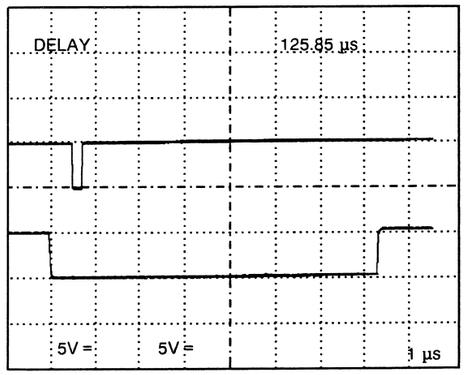

ABLAUFSTEUERUNG
SEQUENZ CONTROL
SCHRIFT / KREIS
SPEICHER
TEXT / CIRCLE
MEMORY
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCP 50
40214-770.00
SCHALTPLAN
CIRCUIT DIAGRAM
ABLAUFSTEUERUNG
SEQUENZ CONTROL
MCP50
GRUNDIG
electronic
Gerat: VG 1100
KT
ZEILEN-ZAEHLER
LINE COUNTER
PIXEL-ZAEHLER
PIXEL COUNTER
UHR
CLOCK
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCP50
40214-770.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
SCHALTPLAN
CIRCUIT DIAGRAM
ABLAUFSTEUERUNG
SEQUENCE CONTROL
MCP50
GRUNDIG
electronic
Gerat: VG1100
KT



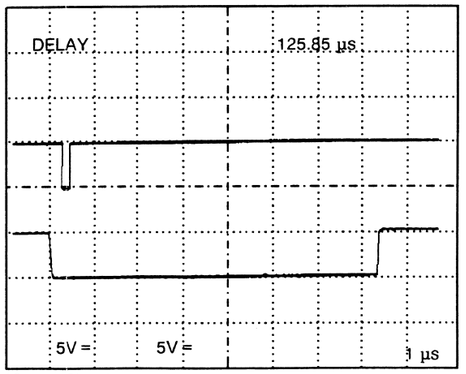
IC 104 Pin 13
IC 101 Pin 10 (H-Impuls/H pulse)



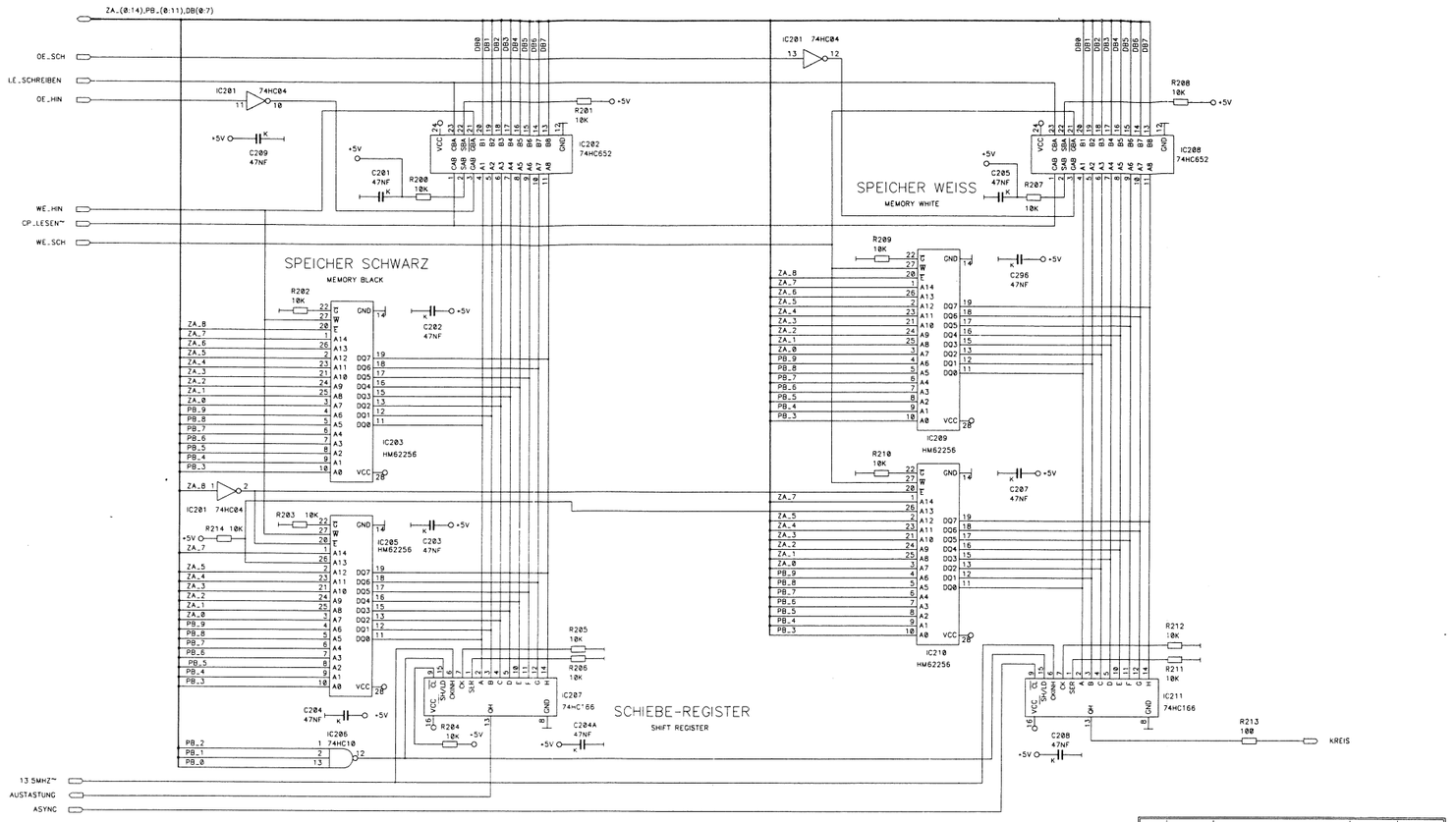
IC 102 Pin 1
IC 101 Pin 10 (H-Impuls/H pulse)



IC 102 Pin 4
IC 101 Pin 10 (H-Impuls/H pulse)



IC 103 Pin 13
IC 101 Pin 10 (H-Impuls/H pulse)



CHIP WIDER

KERAMIK BEDRAHTET

LEITERPLATTE
PRINTED CIRCUIT BOARD MCP50
40214-770.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
02		AE.PR.18/92/163	28.05.92	LANGER
01		AE.PR.18/91/891	15.02.91	APPONYI

Schutzvermerk nach DIN 34 beachtet | Aenderungen vorbehalten

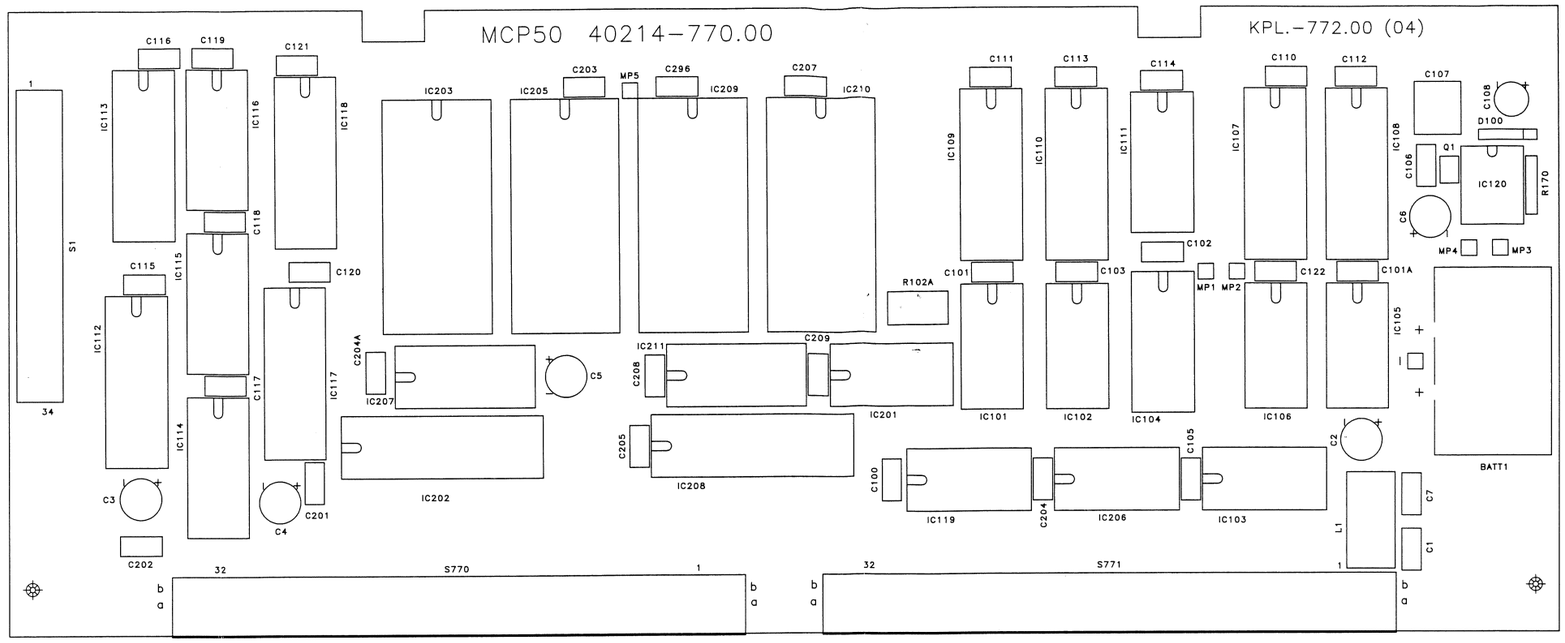
	Tag	Name		
Gez.	01.04.90	JE41 G.HOFMANN	Sach-Nr 40214-986.77 Bl.3	01
Gepr.	11.04.90	JE41 STARK	Bereiter: 3	02
	22.06.90	GR		

GRUNDIG electronic

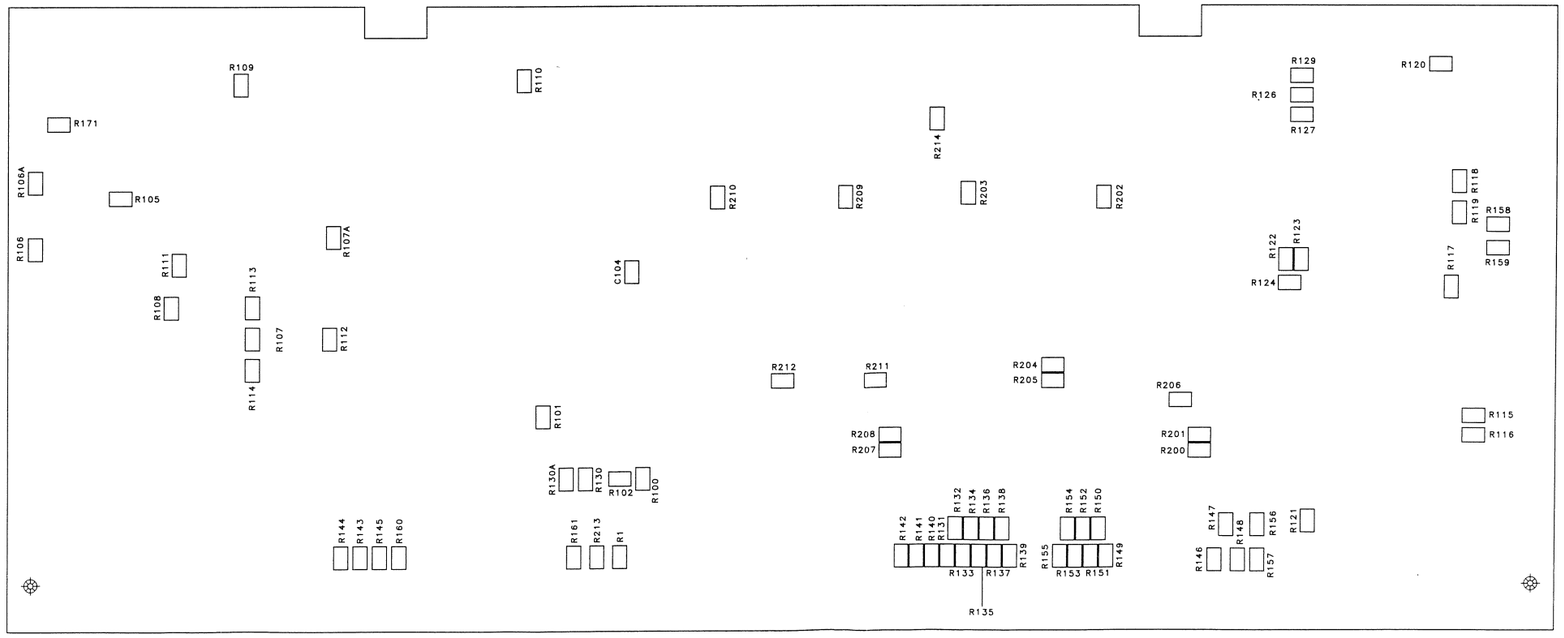
Bezeichnung: MCP50 SCHALTPLAN CIRCUIT DIAGRAM

Titel: SCHRIFT/KREISSPEICHER TEXT/CIRCLE MEMORY

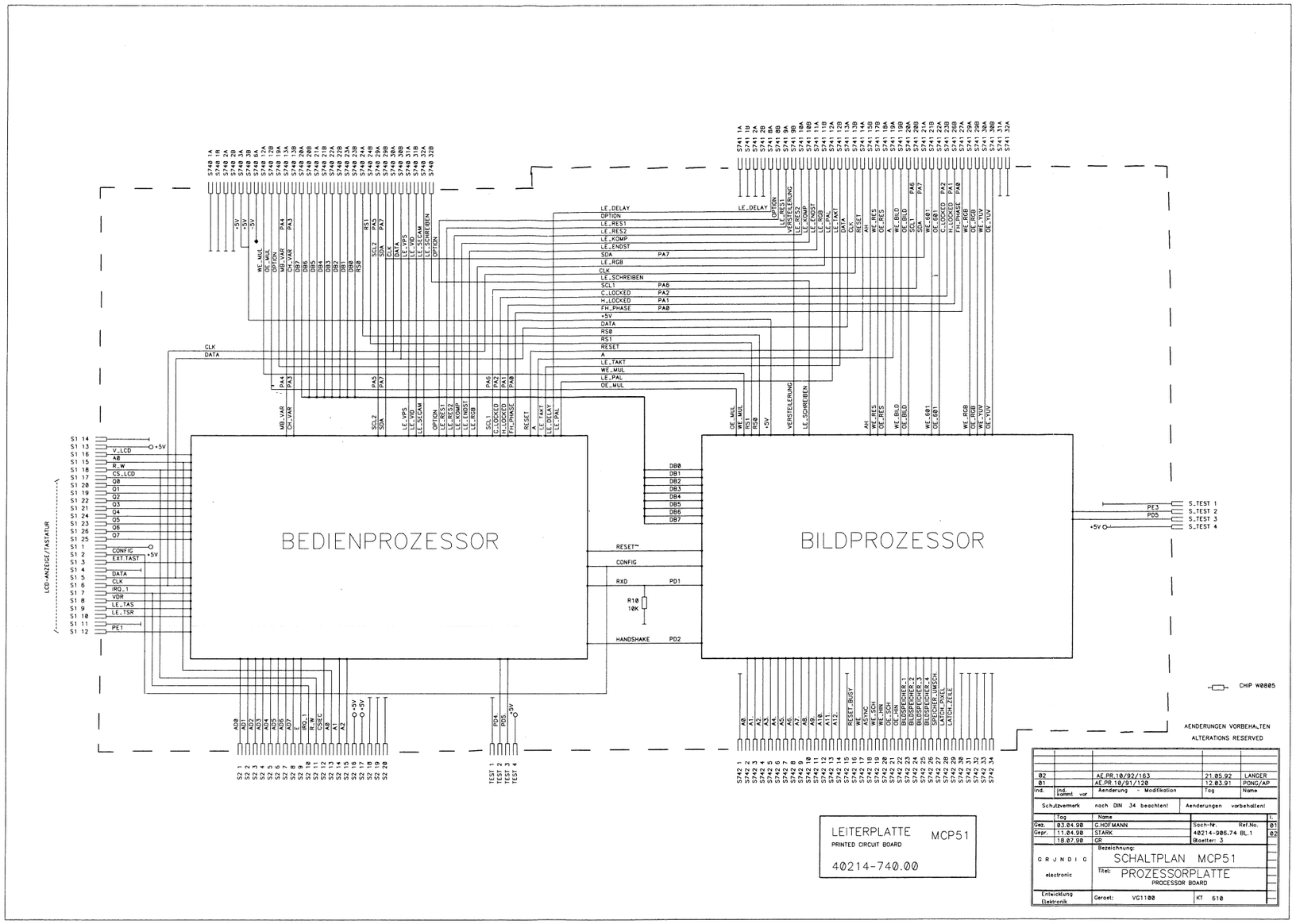
Entwicklung Elektronik | Gerael: VG1100 | XT

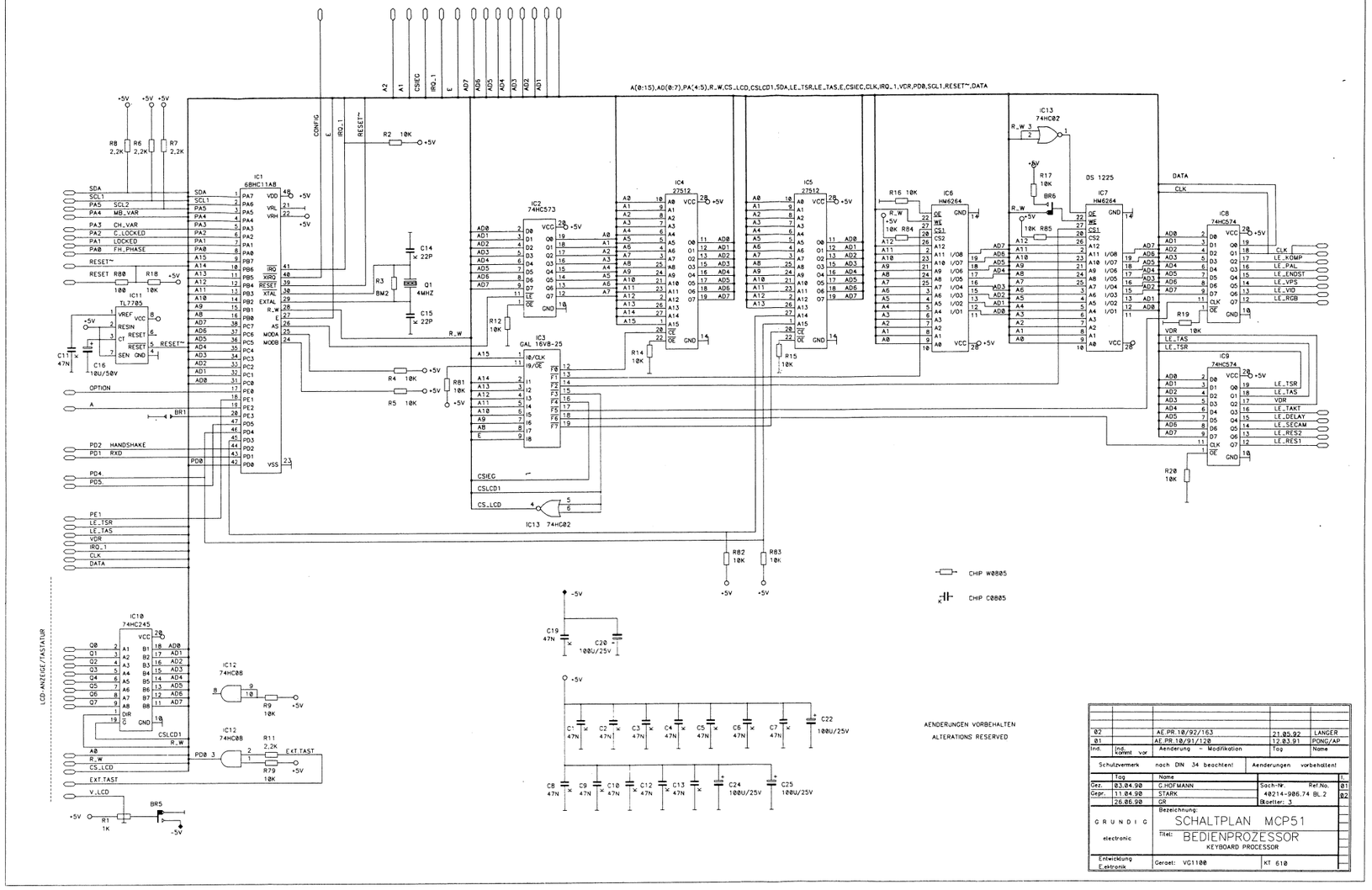


Bestückungsseite / Component side



Lötseite / Soldering side


BEDIENPROZESSOR
BILDPROZESSOR
LCD-ANZEIGE/TASTATUR
LE_DELAY
OPTION
LE_RES1
LE_RES2
LE_KOMP
LE_ENDST
SDA
LE_RGB
CLK
LE_SCHREIBEN
SCL1
C_LOCKED
H_LOCKED
FH_PHASE
+5V
DATA
RS0
RS1
RESET
A
LE_TAKT
WE_MUL
LE_PAL
OE_MUL
VERSTEUERUNG
AH
WE_RES
OE_RES
WE_BILD
OE_BILD
WE_681
OE_681
WE_RGB
OE_RGB
WE_YUV
OE_YUV
V_LCD
A0
R_W
CS_LCD
CONFIG
EXT.TAST
DATA
CLK
IRQ_1
VDR
LE_TAS
LE_TSR
PE1
RESET~
RXD
PD1
R10
10K
HANDSHAKE
PD2
PE3
PD5
S_TEST 1
S_TEST 2
S_TEST 3
S_TEST 4
CHIP W8805
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCP51
40214-740.00
02 AE.PR.10/92/163 21.05.92 LANGER
01 AE.PR.10/91/120 12.03.91 PONG/AP
Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!
Gez. 03.04.90 G.HOFMANN
Gepr. 11.04.90 STARK
18.07.90 GR
Soch-Nr. 40214-986.74 Bl.1
Boetter: 3
GRUNDIG electronic
Bezeichnung: SCHALTPLAN MCP51
Titel: PROZESSORPLATTE
PROCESSOR BOARD
Entwicklung Elektronik
Geroet: VG1100
KT 610



AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

Ind.	Ind. kommt vor	Aenderung – Modifikation	Tag	Name
02		AE.PR.10/92/163	21.05.92	LANGER
01		AE.PR.10/91/120	12.03.91	PONG/AP

Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!

	Tag	Name		
Gez.	03.04.90	G.HOFMANN	Sach-Nr. Ref.No.	01
Gepr.	11.04.90	STARK	48214-986.74 BL.2	02
	26.06.90	GR	Blaetter: 3	

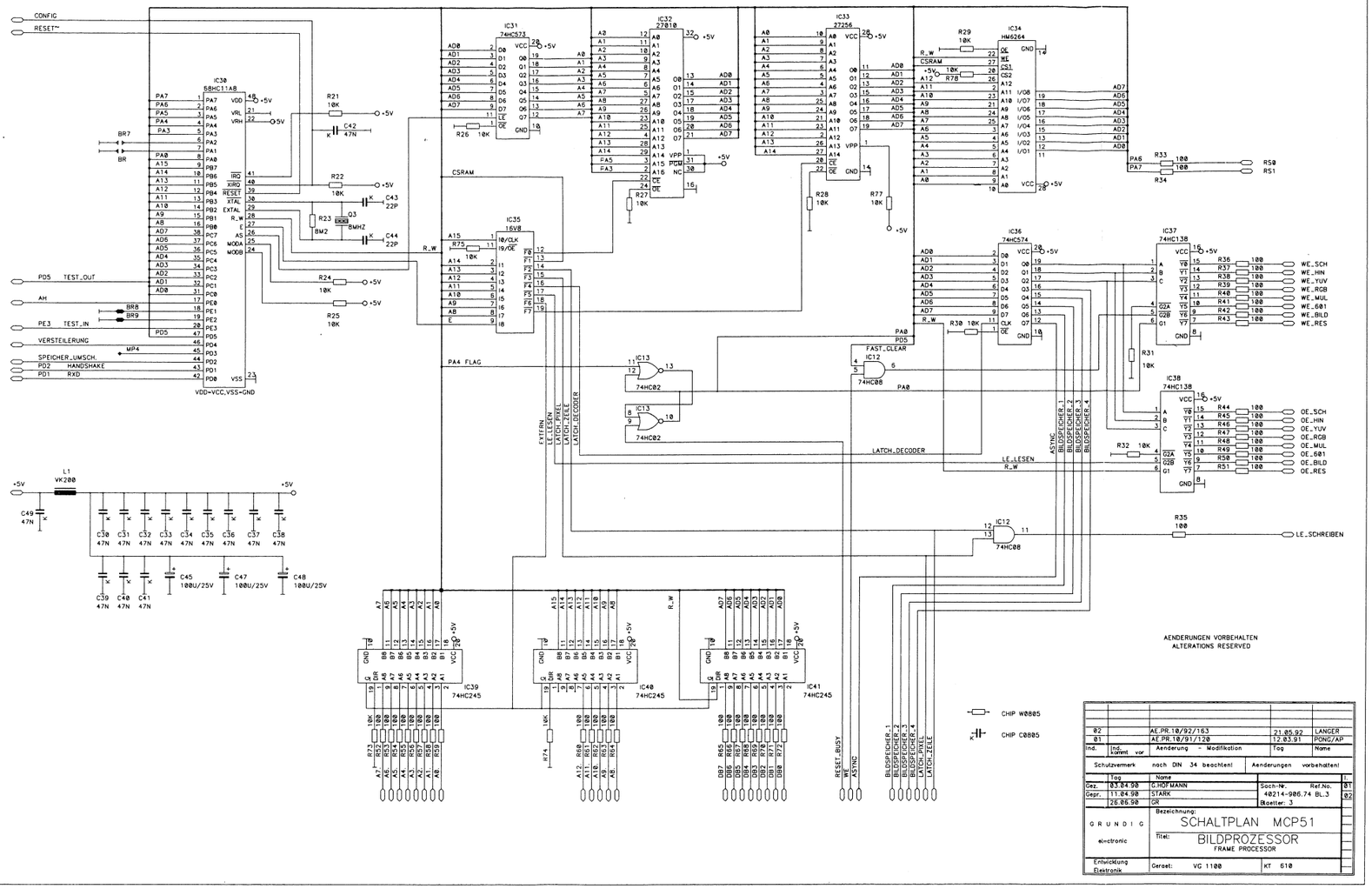
GRUNDIG electronic

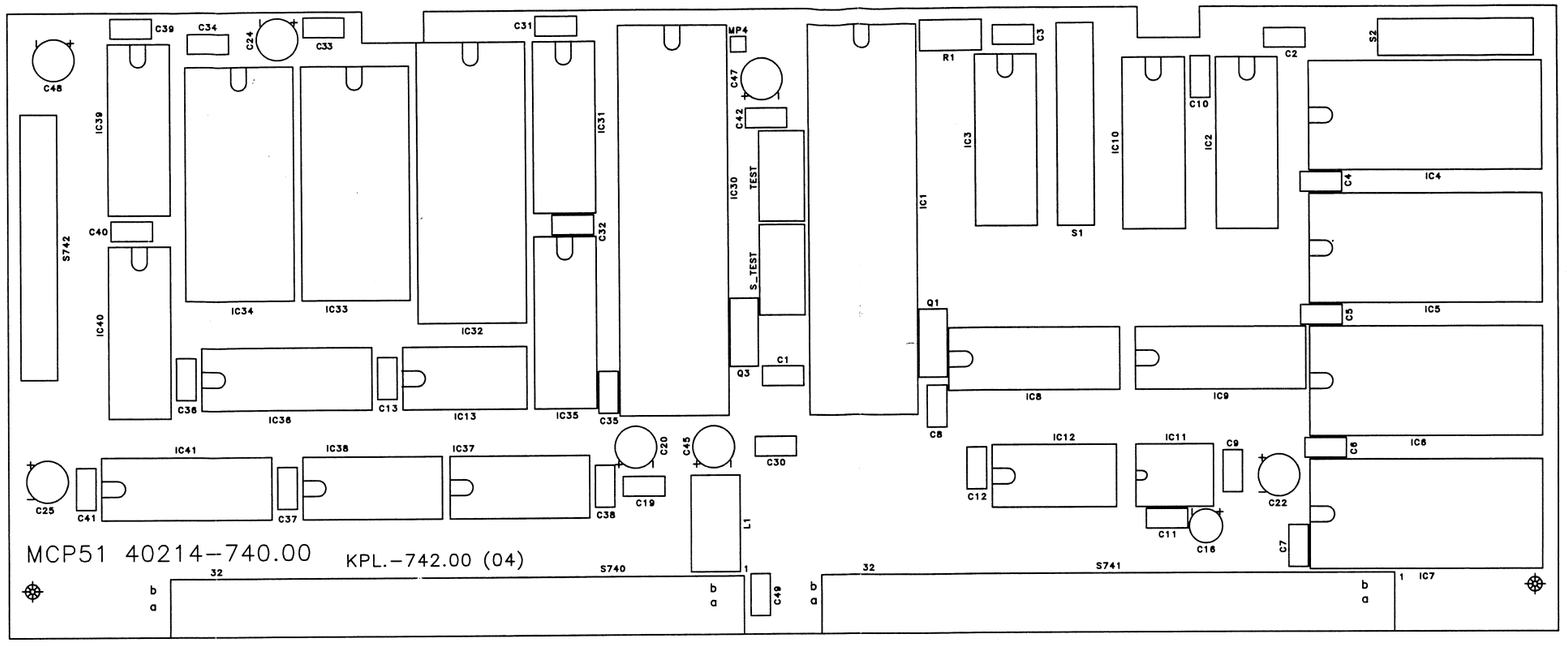
Bezeichnung: SCHALTPLAN MCP51

Titel: BEDIENPROZESSOR
KEYBOARD PROCESSOR

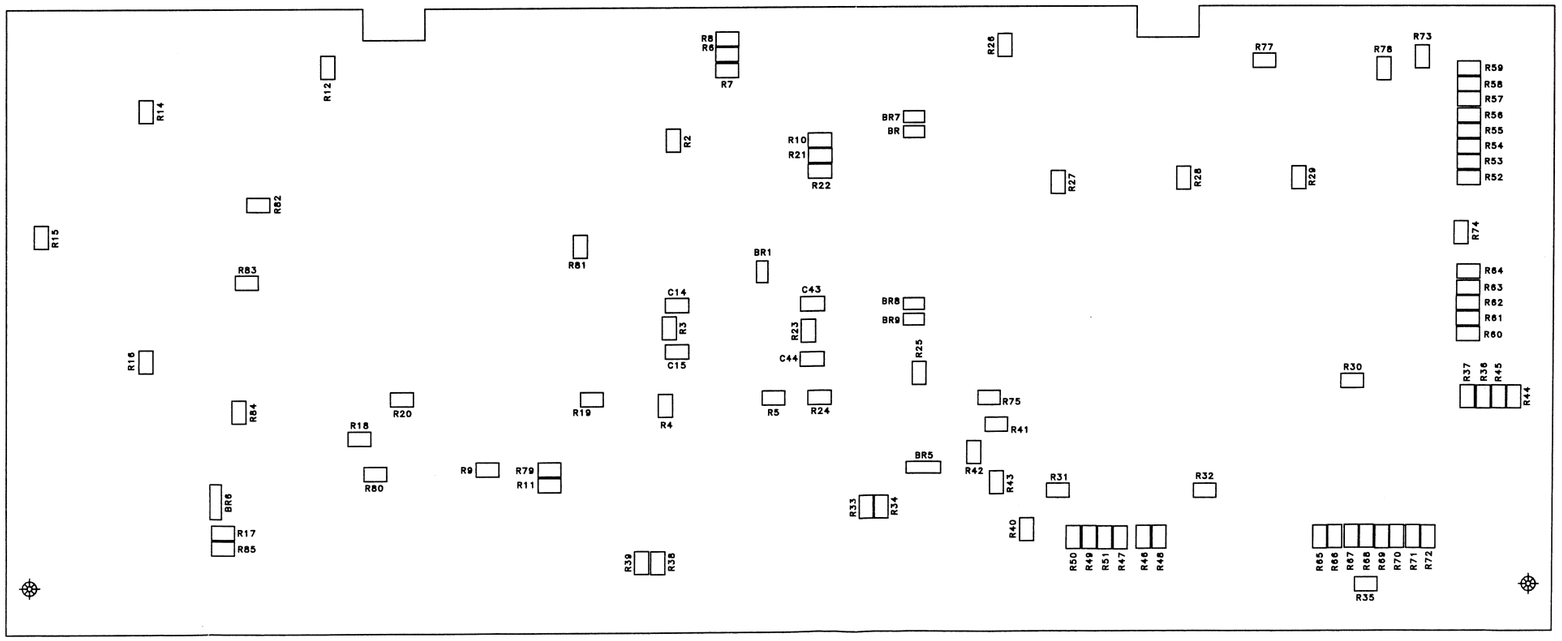
Entwicklung Elektronik

Geraet: VG1100 KT 610

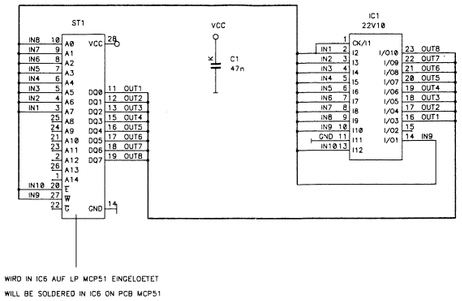

CONFIG
RESET~
IC30
68HC11A8
PD5 TEST_OUT
AH
PE3 TEST_IN
VERSTEILERUNG
SPEICHER_UMSCH.
PD2 HANDSHAKE
PD1 RXD
VDD=VCC,VSS=GND
IC31
74HC573
IC32
27010
IC33
27256
IC34
HM6264
IC35
16V8
IC36
74HC574
IC37
74HC138
IC38
74HC138
IC39
74HC245
IC40
74HC245
IC41
74HC245
IC12
74HC08
IC13
74HC02
CSRAM
PA4 FLAG
FAST_CLEAR
LATCH_DECODER
LE_LESEN
LE_SCHREIBEN
RESET_BUSY
CHIP W0805
CHIP C0805
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
SCHALTPLAN MCP51
BILDPROZESSOR
FRAME PROCESSOR
G R U N D I G
electronic
AE.PR.10/92/163
AE.PR.10/91/120
Schutzvermerk nach DIN 34 beachten!
Aenderungen vorbehalten!
C.HOFMANN
STARK
GR
48214-986.74 BL.3
Bloetter: 3
VG 1100
KT 610



Bestückungsseite / Component side



Lötseite / Soldering side



Wird an Stelle IC 6 auf LP MCP 51 eingelötet

Is soldered onto PCB MCP 51 instead of IC 6

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

LEITERPLATTE
PRINTED CIRCUIT BOARD
MCP53
40214-860.00

Inc.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
Schutzvermerk		nach DIN 34 beachten!	Aenderungen vorbehalten!	

	Tag	Name	
Ges.	03.04.92	KLETZANDER /AP	Sach-Nr. Ref.No.
Gepr.	25.05.92	HOFMANN	40214-986.86 BL.1
	25.05.92	GR	Bloetter: 1

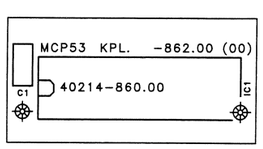
GRUNDIG electronic

Bezeichnung: MCP53 SCHALTPLAN CIRCUIT DIAGRAMM

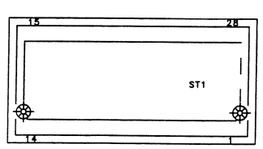
Titel: SOFTWAREKENNUNG

Entwicklung Elektronik

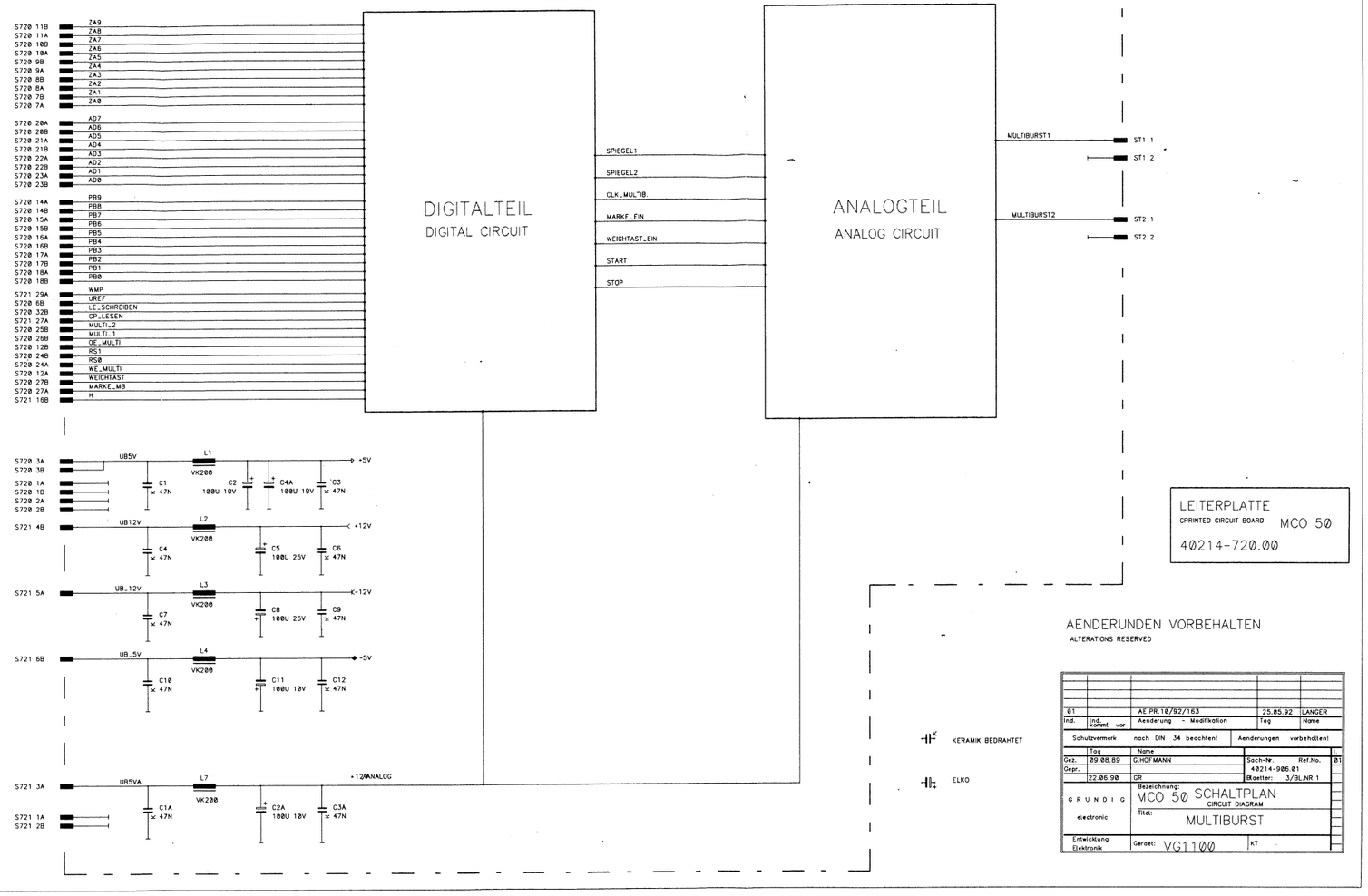
Geraet: VG1100 KT

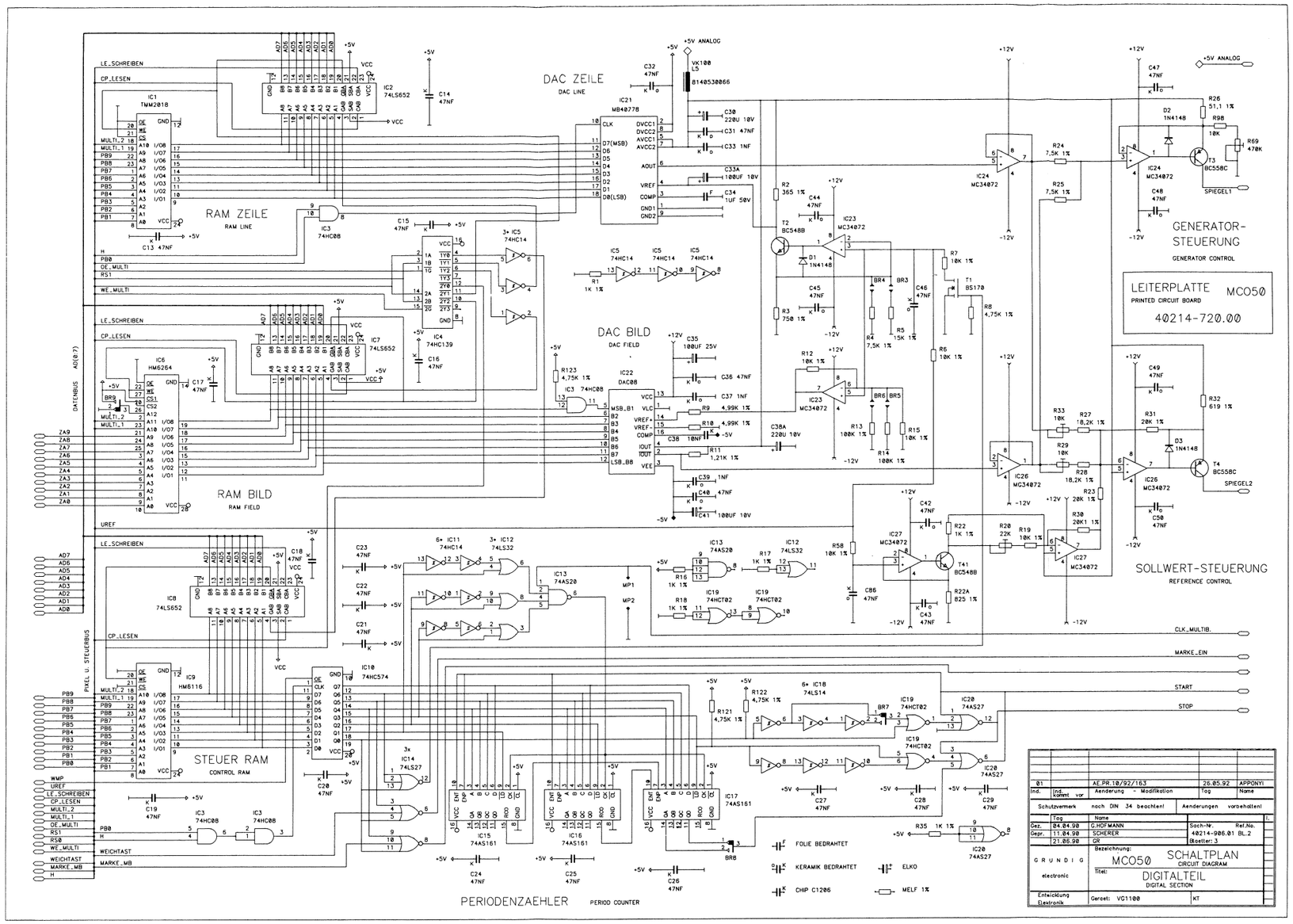


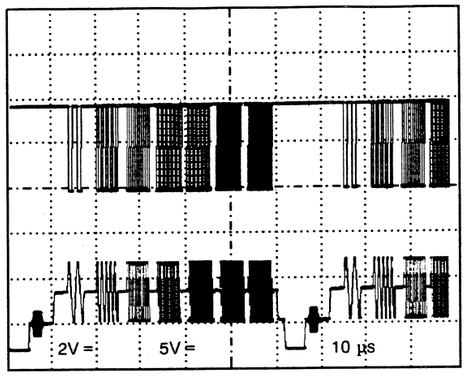
Bestückungsseite / Component side



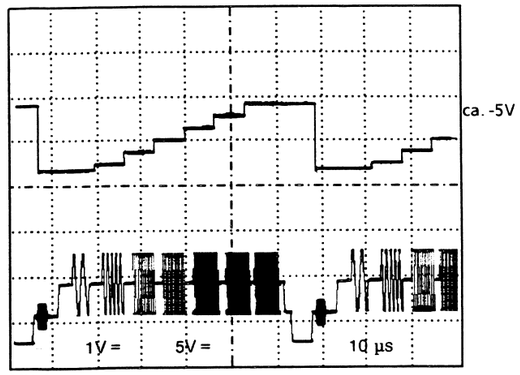
Lötseite / Soldering side


S720 11B
S720 11A
S720 10B
S720 10A
S720 9B
S720 9A
S720 8B
S720 8A
S720 7B
S720 7A
ZA9
ZA8
ZA7
ZA6
ZA5
ZA4
ZA3
ZA2
ZA1
ZA0
S720 20A
S720 20B
S720 21A
S720 21B
S720 22A
S720 22B
S720 23A
S720 23B
AD7
AD6
AD5
AD4
AD3
AD2
AD1
AD0
S720 14A
S720 14B
S720 15A
S720 15B
S720 16A
S720 16B
S720 17A
S720 17B
S720 18A
S720 18B
PB9
PB8
PB7
PB6
PB5
PB4
PB3
PB2
PB1
PB0
S721 29A
S720 6B
S720 32B
S721 27A
S720 25B
S720 26B
S720 12B
S720 24B
S720 24A
S720 12A
S720 27B
S720 27A
S721 16B
WMP
UREF
LE_SCHREIBEN
GP_LESEN
MULTI_2
MULTI_1
OE_MULTI
RST
RSB
WE_MULTI
WEICHTAST
MARKE_MB
H
DIGITALTEIL
DIGITAL CIRCUIT
SPIEGEL1
SPIEGEL2
CLK_MULTIB
MARKE_EIN
WEICHTAST_EIN
START
STOP
ANALOGTEIL
ANALOG CIRCUIT
MULTIBURST1
ST1 1
ST1 2
MULTIBURST2
ST2 1
ST2 2
S720 3A
S720 3B
S720 1A
S720 1B
S720 2A
S720 2B
UB5V
L1
VK200
C1
47N
C2
100U 10V
C4A
100U 10V
C3
47N
+5V
S721 4B
UB12V
L2
VK200
C4
47N
C5
100U 25V
C6
47N
+12V
S721 5A
UB_12V
L3
VK200
C7
47N
C8
100U 25V
C9
47N
-12V
S721 6B
UB_5V
L4
VK200
C10
47N
C11
100U 10V
C12
47N
-5V
S721 3A
UB5VA
L7
VK200
C1A
47N
C2A
100U 10V
C3A
47N
+12VANALOG
S721 1A
S721 2B
KERAMIK BEDRAHTET
ELKO
LEITERPLATTE
CPRINTED CIRCUIT BOARD
MCO 50
40214-720.00
AENDERUNDEN VORBEHALTEN
ALTERATIONS RESERVED
01
AE.PR.10/92/163
25.05.92
LANGER
Ind.
Ind. kommt vor
Aenderung - Modifikation
Tag
Name
Schutzvermerk
nach DIN 34 beachten!
Aenderungen vorbehalten!
Tag
Name
Gez.
09.08.89
G.HOFMANN
Soch-Nr.
Ref.No.
01
Gepr.
40214-906.01
22.05.90
GR
Blaetter:
3/BL.NR.1
GRUNDIG
electronic
Bezeichnung:
MCO 50 SCHALTPLAN
CIRCUIT DIAGRAM
Titel:
MULTIBURST
Entwicklung
Elektronik
Geraet:
VG1100
KT

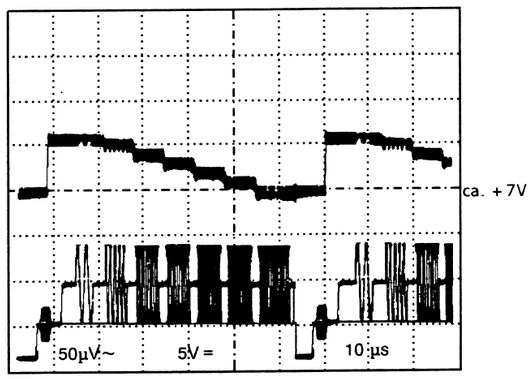

DAC ZEILE
DAC LINE
RAM ZEILE
RAM LINE
DAC BILD
DAC FIELD
RAM BILD
RAM FIELD
GENERATOR-STEUERUNG
GENERATOR CONTROL
SOLLWERT-STEUERUNG
REFERENCE CONTROL
STEUER RAM
CONTROL RAM
PERIODENZAEHLER
PERIOD COUNTER
LEITERPLATTE MC050
PRINTED CIRCUIT BOARD
40214-720.00
SCHALTPLAN
CIRCUIT DIAGRAM
DIGITALTEIL
DIGITAL SECTION
FOLIE BEDRAHTET
KERAMIK BEDRAHTET
CHIP C1206
ELKO
MELF 1%
DATENBUS AD(0:7)
PIXEL U. STEUERBUS
CLK_MULTIB.
MARKE_EIN
START
STOP



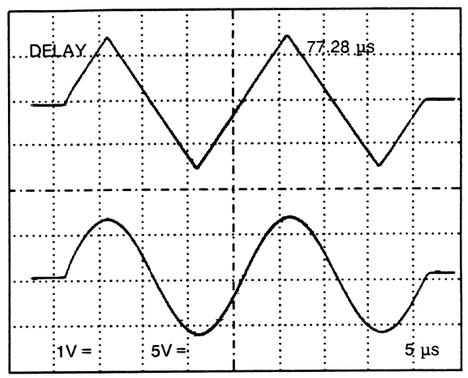
MP 1
FBAS-Ausgang/CVBS output
Multiburst 0,5 bis 6 MHz



MP 3
FBAS-Ausgang/CVBS output
Multiburst 0,5 bis 6 MHz

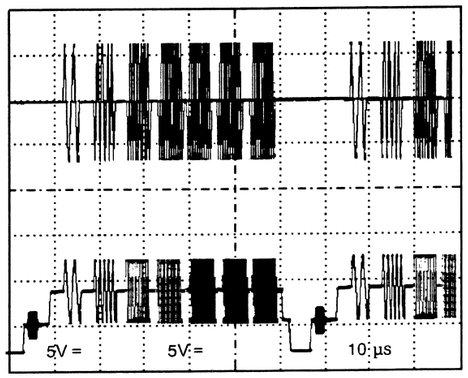


IC 29 Pin 3
FBAS-Ausgang/CVBS output
Multiburst 0,5 bis 6 MHz



MP 5

MP 7
0,5-MHz-Schwingung/0.5 MHz oscillation



MP 7
FBAS-Ausgang/CVBS output
Multiburst 0,5 bis 6 MHz

DREIECKSPANNUNGS-GENERATOR
TRIANGLE WAVE GENERATOR

SOLLWERT-UMSCHALTER
REFERENCE ALTERNATOR

BUFFER

DREIECK-SINUS-WANDLER
TRIANGLE TO SINE CONVERERTER

AUSGANGS-VERSTAERKER
OUTPUT AMPLIFIER

COMPARATOR

START-STOP-SCHALTER
START STOP SWITCH

START-STOP-LOGIK

W204 BEDRAHTET
MELF 1%
CHIP W0805
KERAMIK BEDRAHTET
CHIP C1206
CHIP C0805
TANTAL ELKO
ELKO

LEITERPLATTE
PRINTED CIRCUIT BOARD MC050
40214-720.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

01		AE.PR.10/92/163	25.05.92	LANGER
Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name

Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!

	Tag	Name		
Gez.	09.08.89	C.HOFMANN	Sach-Nr.	Ref.No. 01
Gepr.			40214-906.01	
	26.05.92	QC	Bloetter:	3/BL.NR.3

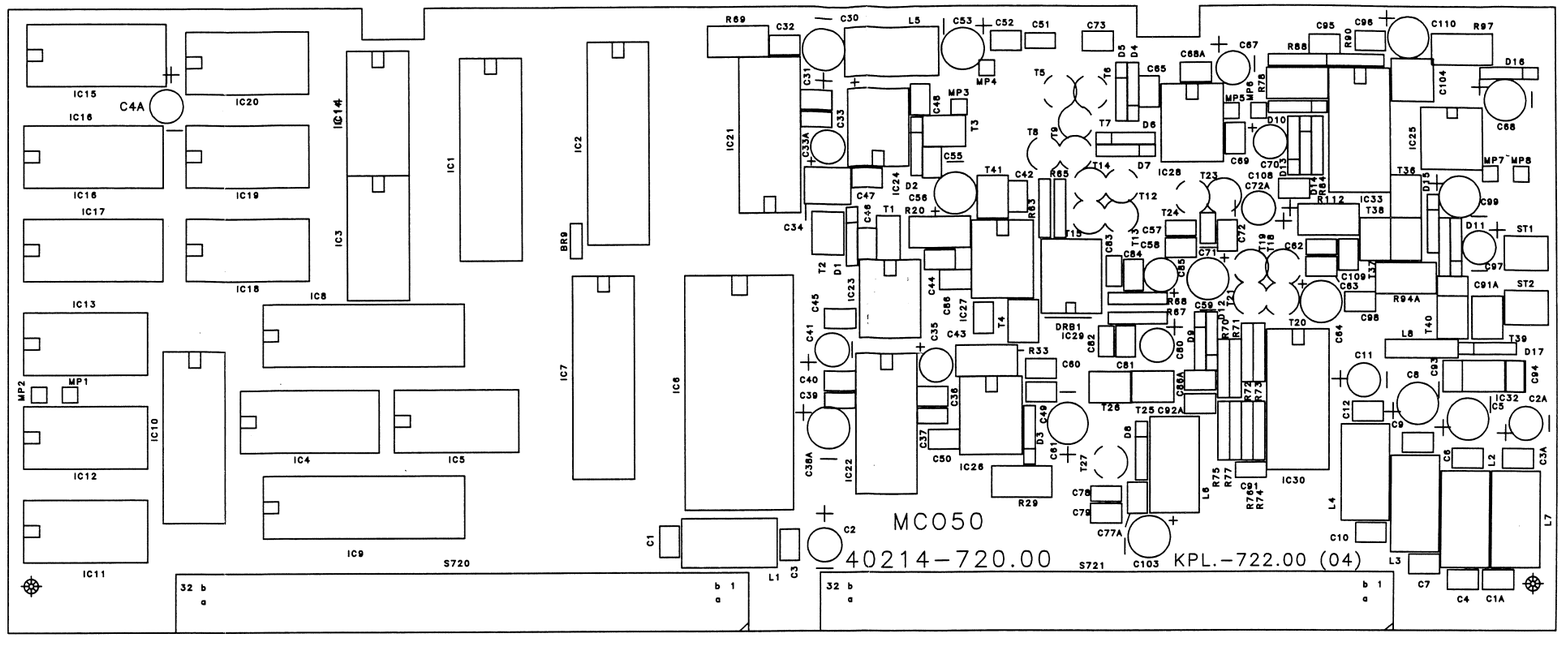
GRUNDIG electronic

Bezeichnung: MC0 50 SCHALTPLAN CIRCUIT DIAGRAM

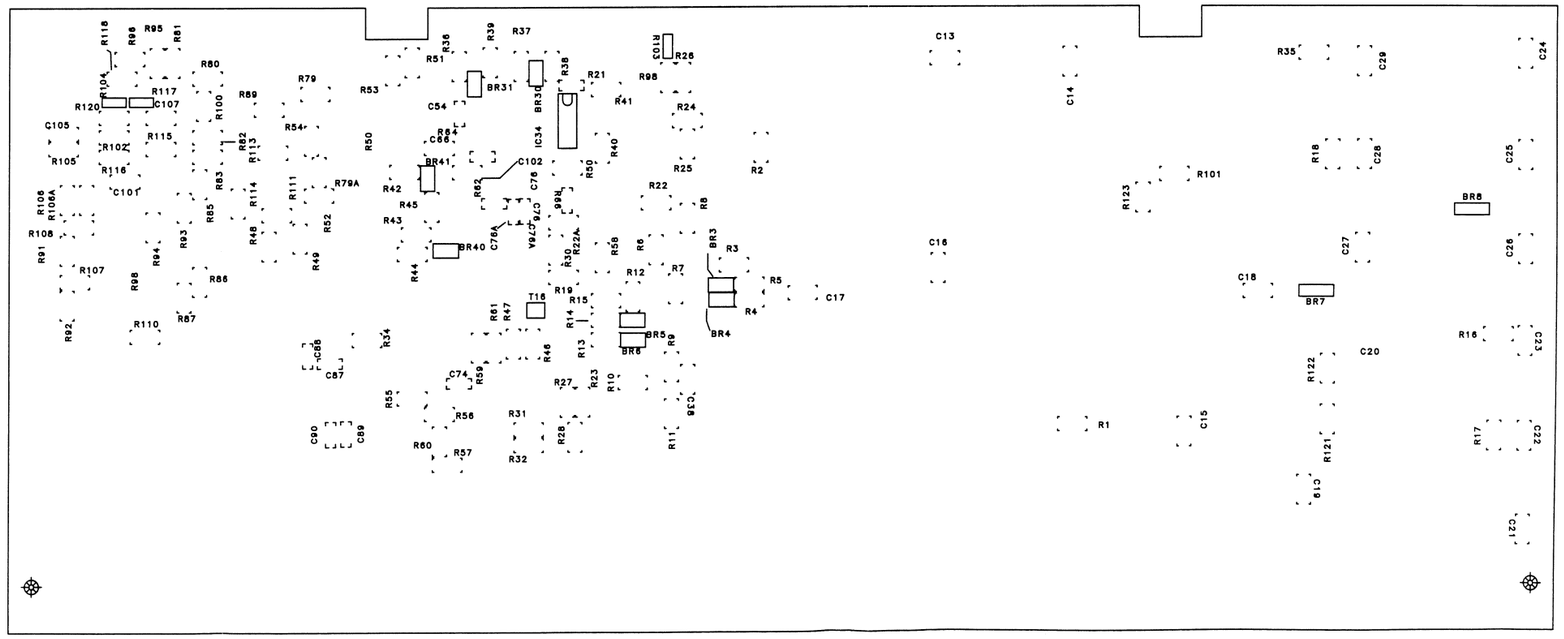
Titel: ANALOGTEIL ANALOG SECTION

Entwicklung Elektronik

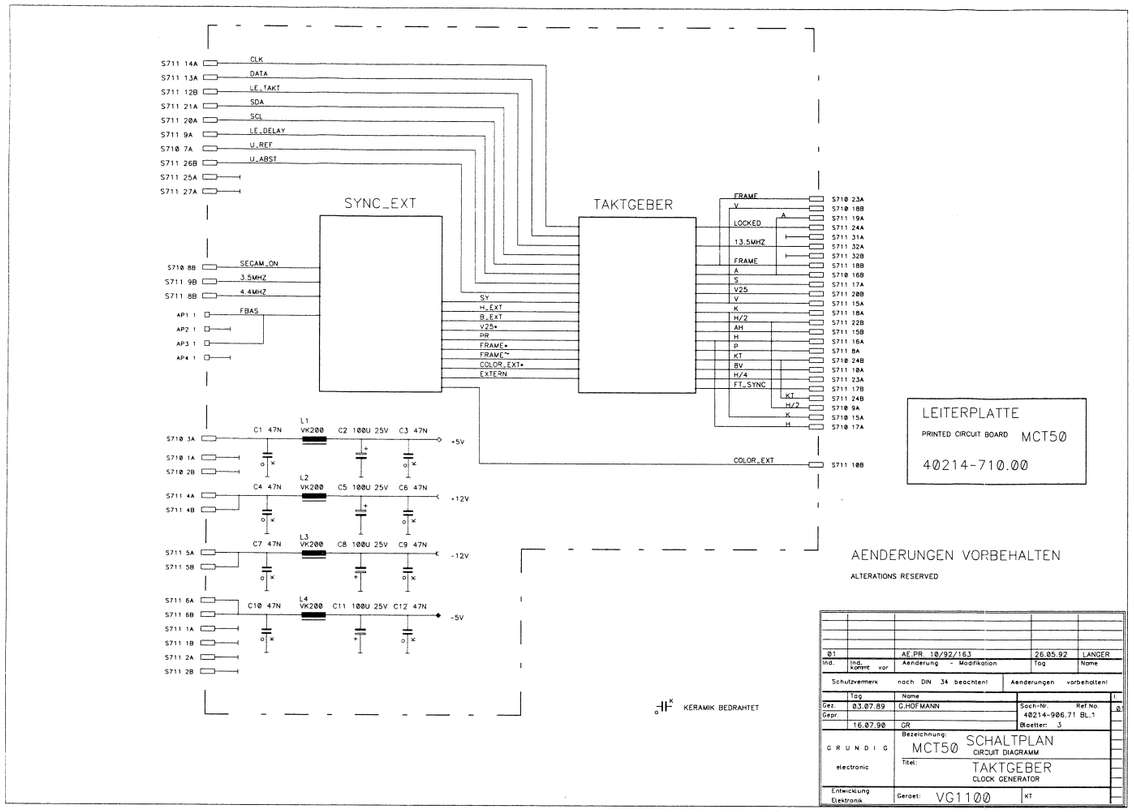
Geraet: VG1100 KT

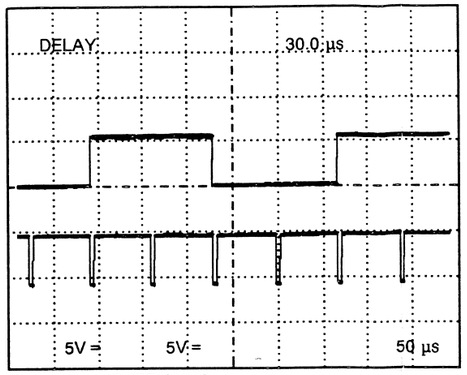


Bestückungsseite / Component side

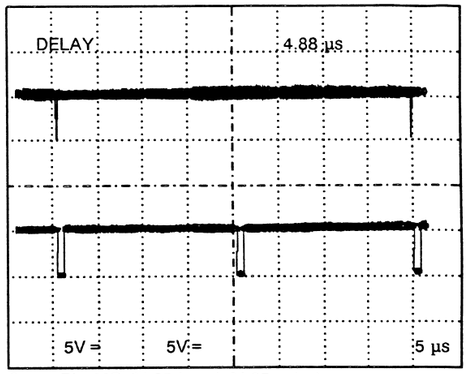


Lötseite / Soldering side

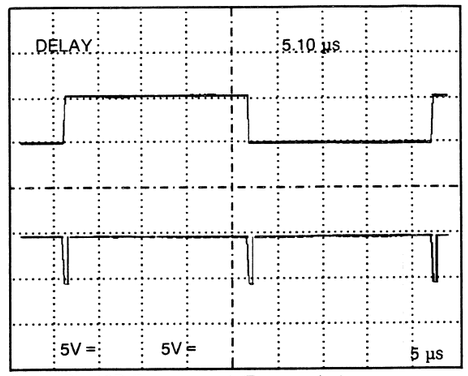




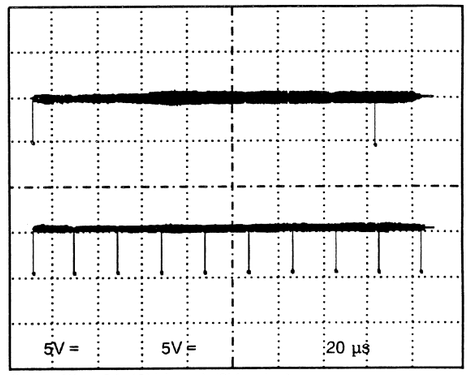
S 711 Pin 17B (FT-SYNC)
S 711 Pin 17A (S-Impuls/S pulse)



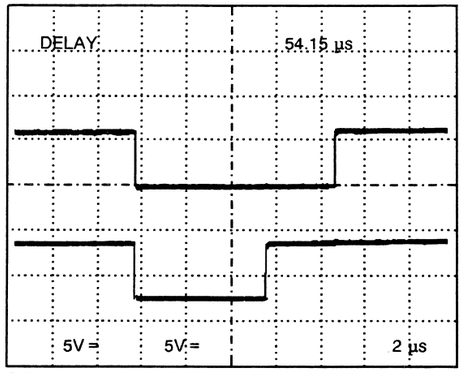
S 711 Pin 20B (V 25-Impuls/V 25 pulse)
S 711 Pin 15A (V-Impuls/V pulse)



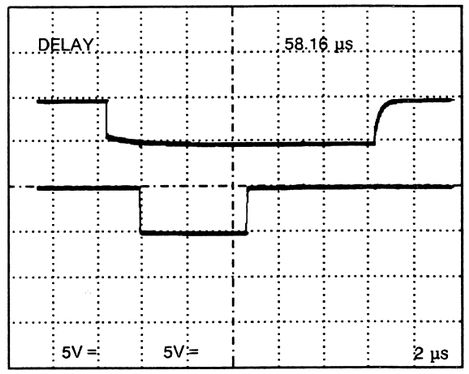
S 711 Pin 18B (Frame-Impuls/Frame pulse)
S 711 Pin 15A (V-Impuls/V pulse)



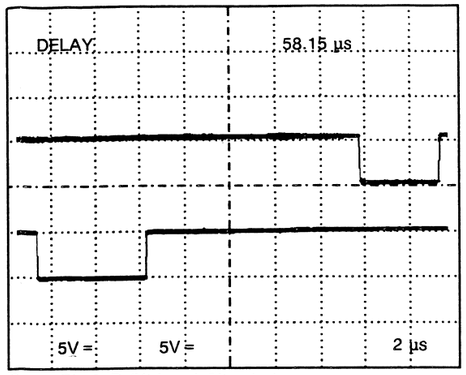
S 711 Pin 10A (8V-Impuls/8V pulse)
S 711 Pin 15A (V-Impuls/V pulse)



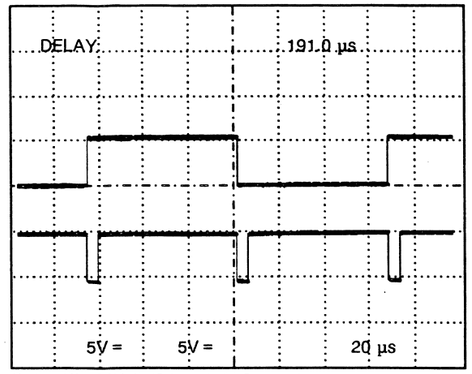
S 711 Pin 16A (H-Impuls/H pulse)
S 711 Pin 17A (S-Impuls/S pulse)



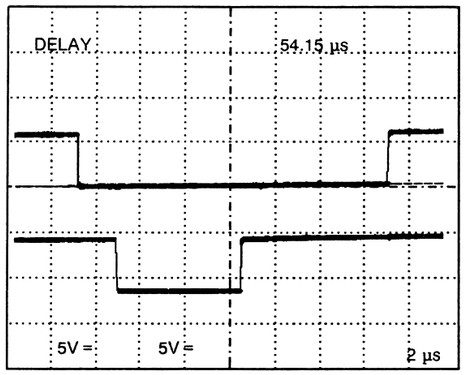
S 711 Pin 15B (AH-Impuls/AH pulse)
S 711 Pin 17A (S-Impuls/S pulse)



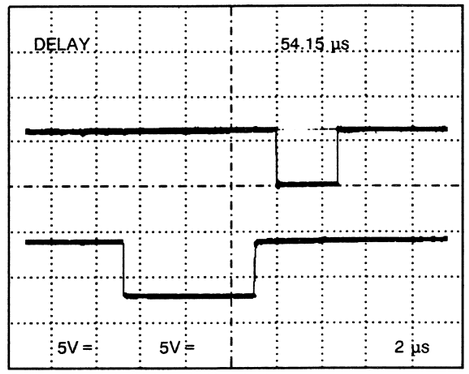
S 711 Pin 24B (Kt-Impuls/Kt pulse)
S 711 Pin 17A (S-Impuls/S pulse)



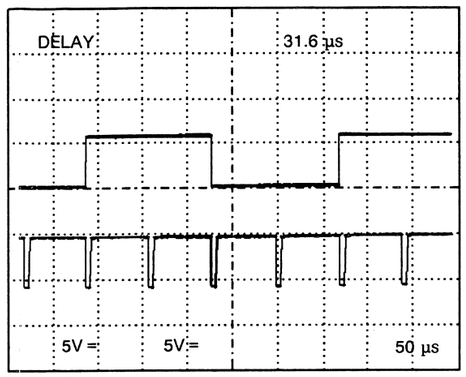
S 711 Pin 22B (H/2-Impuls/H/2 pulse)
S 711 Pin 17A (S-Impuls/S pulse)



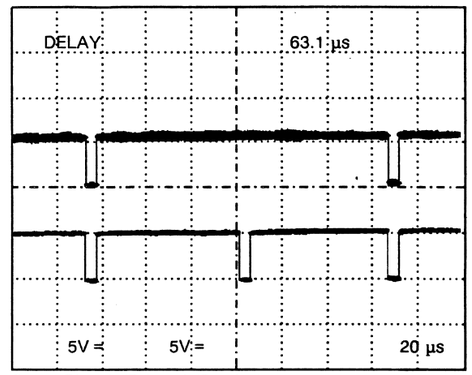
S 711 Pin 19A (A-Impuls/A pulse)
S 711 Pin 17A (S-Impuls/S pulse)



S 711 Pin 18A (K-Impuls/K pulse)
S 711 Pin 17A (S-Impuls/S pulse)



S 711 Pin 23A (H/4-Impuls/H/4 pulse)
S 711 Pin 17A (S-Impuls/S pulse)



S 711 Pin 8A (P-Impuls/P pulse)
S 711 Pin 17A (S-Impuls/S pulse)

SYNC- UND BURST ABTRENNUNG

SYNC- AND BURST SEPARATION

H- ABTRENNUNG

H- SEPARATION

PAL H/2 DEMODULATOR

PAL H/2 DEMODULATOR

8er SEQUENZ RESET

COLOR FRAMING RESET

OSZILLATOR ZUR 8ER SEQUENZERKENNUNG

OSZILLATOR FOR COLOR FRAMING DETECTION

SECAM H/2 DEMODULATOR

SECAM H/2 DEMODULATOR

AENDERUNGEN-
VORBEHALTEN

ALTERATIONS RESERVED

LEITERPLATTE 40214-710.00

PRINTED CIRCUIT BOARD

MCT50

Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
01		AE:/PR/163	26.05.98	WEISG.

Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!

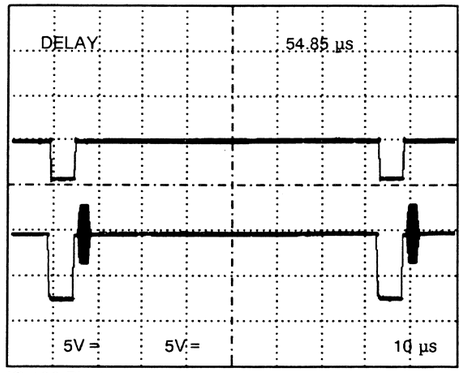
	Tag	Name	
Gez.	05.04.1990	JE41 G.HOFMANN	Soch-Nr. Ref.No. 40214-906.71 BL.2
Gepr.	17.04.1990	JE41 STARK	Bloetter: 3
	17.07.1990	GR	

GRUNDIG electronic

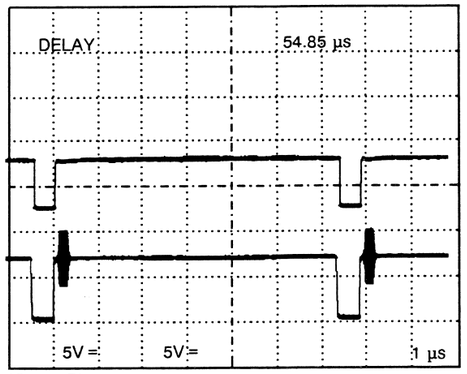
Bezeichnung: SCHALTPLAN
MCT50 CIRCUIT DIAGRAMM

Titel: SYNC_EXT
SYNC_EXT

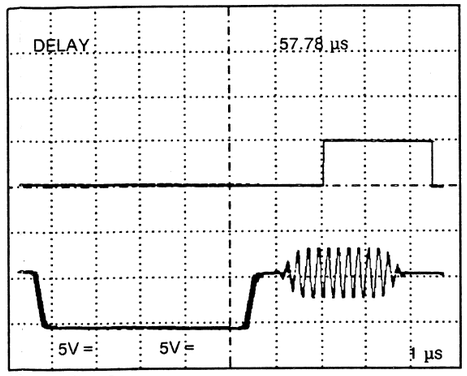
Entwicklung Elektronik | Geraet: VG 1100 | KT



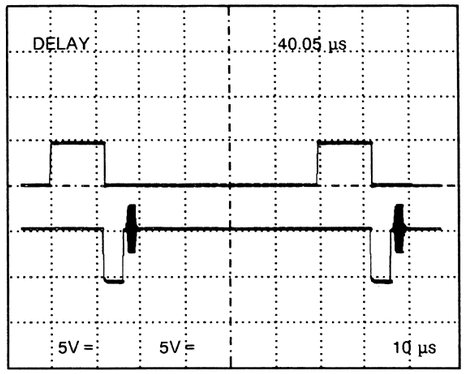
IC 102 Pin 1
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external



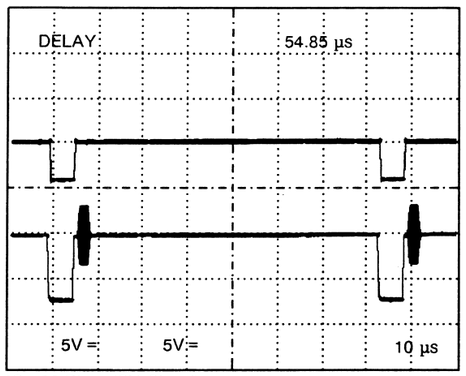
IC 102 Pin 5
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external



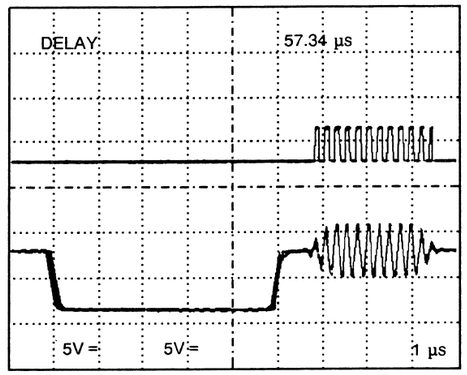
IC 105 Pin 13
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external



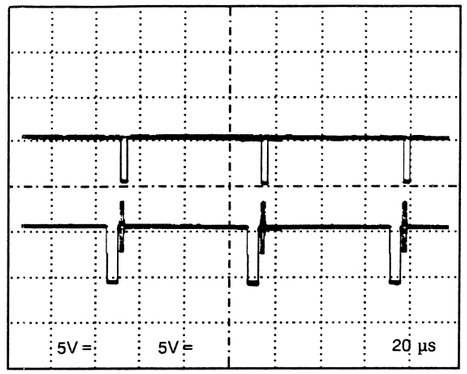
IC 106 Pin 6 (H-Ext.)
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external



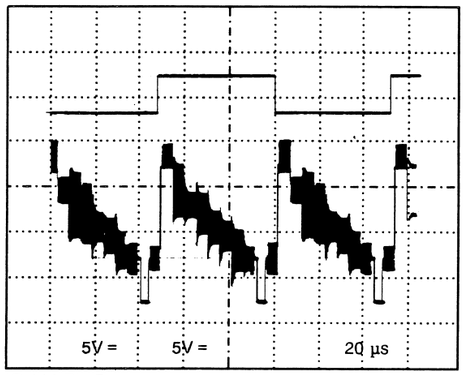
IC 103 Pin 4 (SY-Signal)
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external



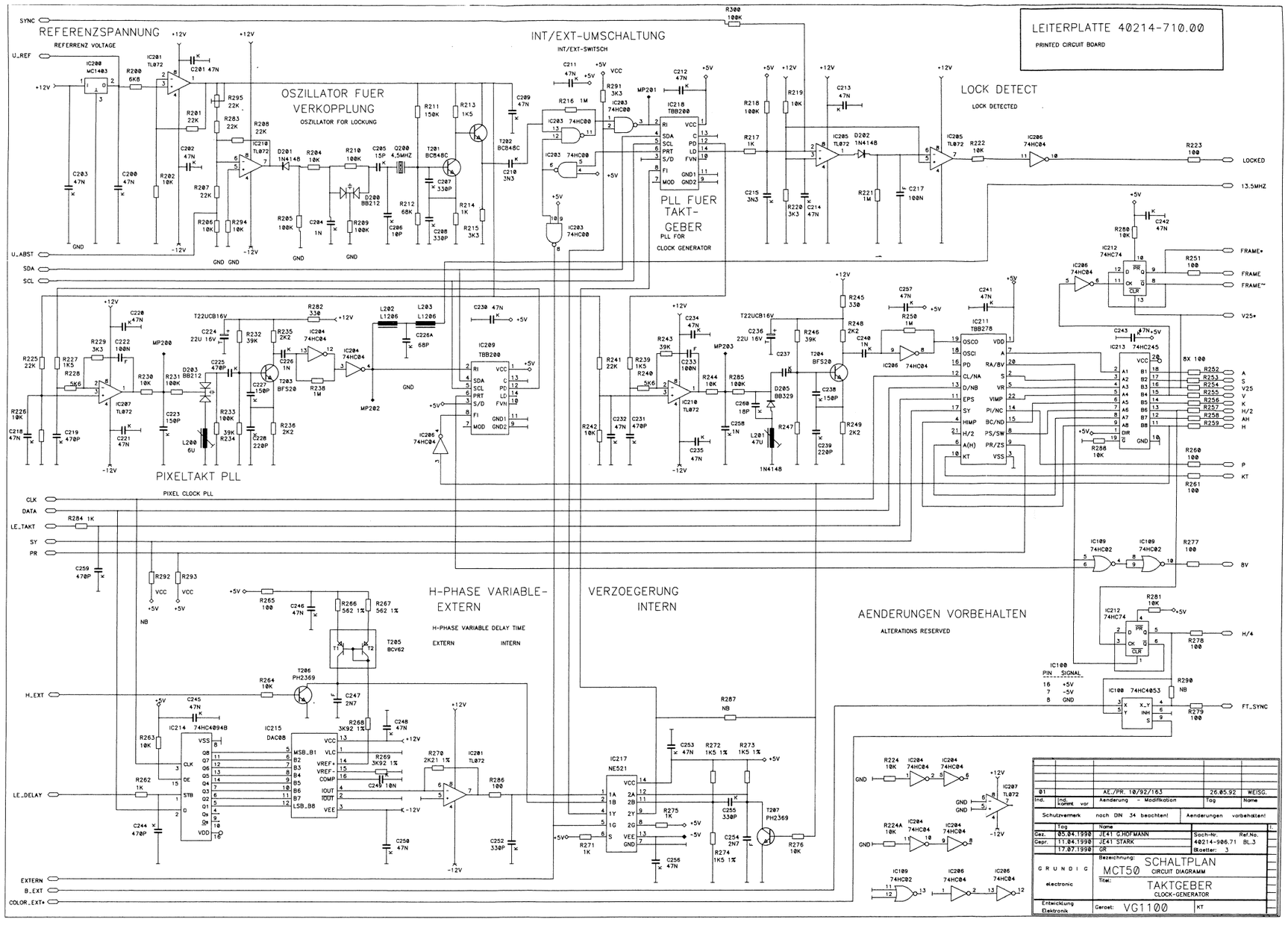
IC 103 Pin 9
Gen Lock Buchse/Socket (Black Burst)
Betrieb: Extern/Operating mode: external

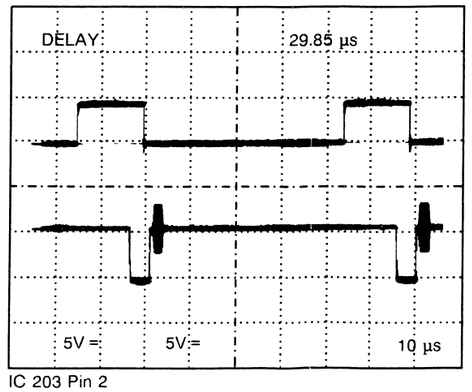


IC 108 Pin 3 (B-Ext.)
Gen Lock Buchse/Socked (Black Burst)
Betrieb: Extern/Operating mode: external

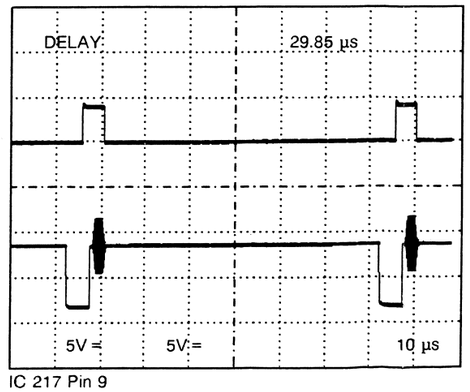


IC 114 Pin 5
(Secam-Zeilen Kennung/Secam line identification)
Gen Lock Buchse/Socked
(Secam-Farbbalken Signal/Secam color bar signal)
Betrieb: Extern-Secam/Operating mode: external-Secam

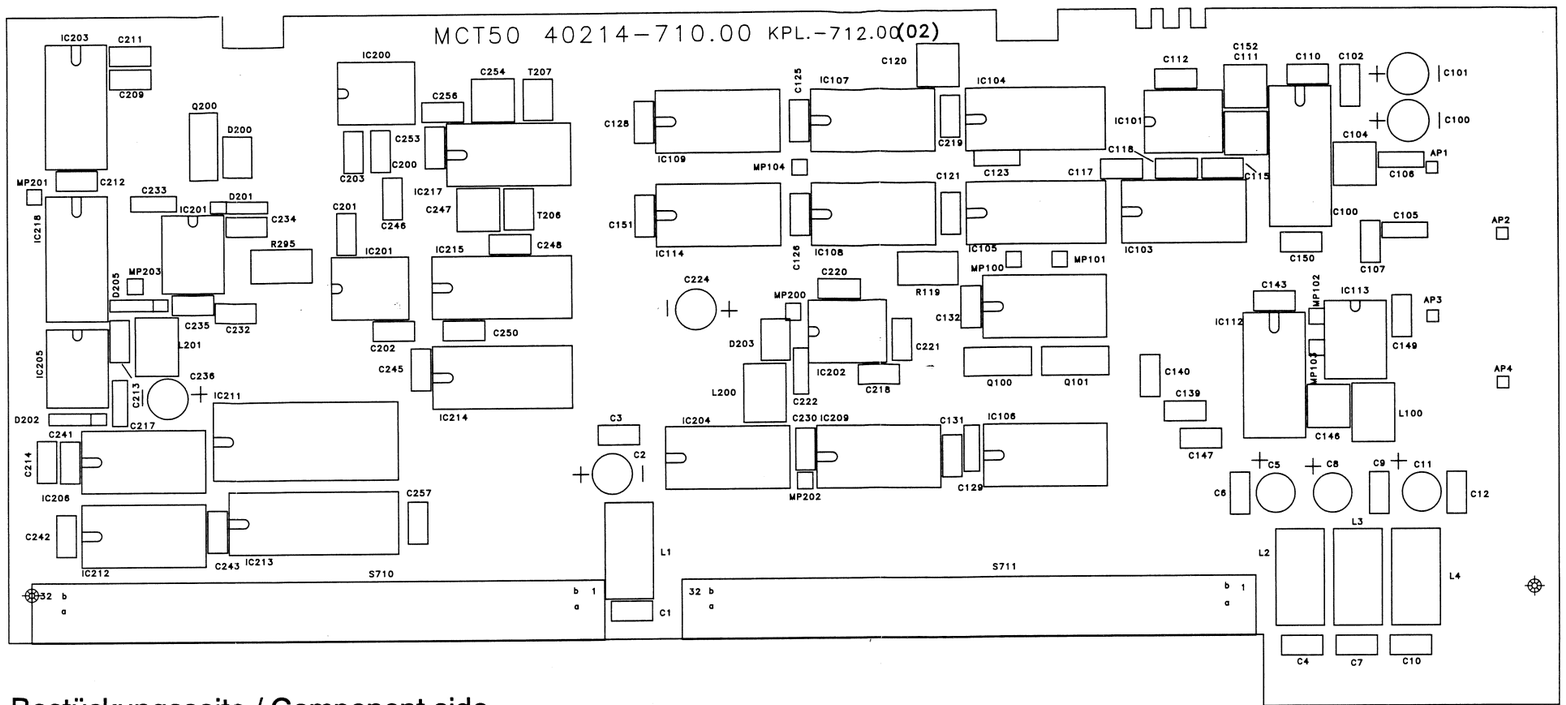




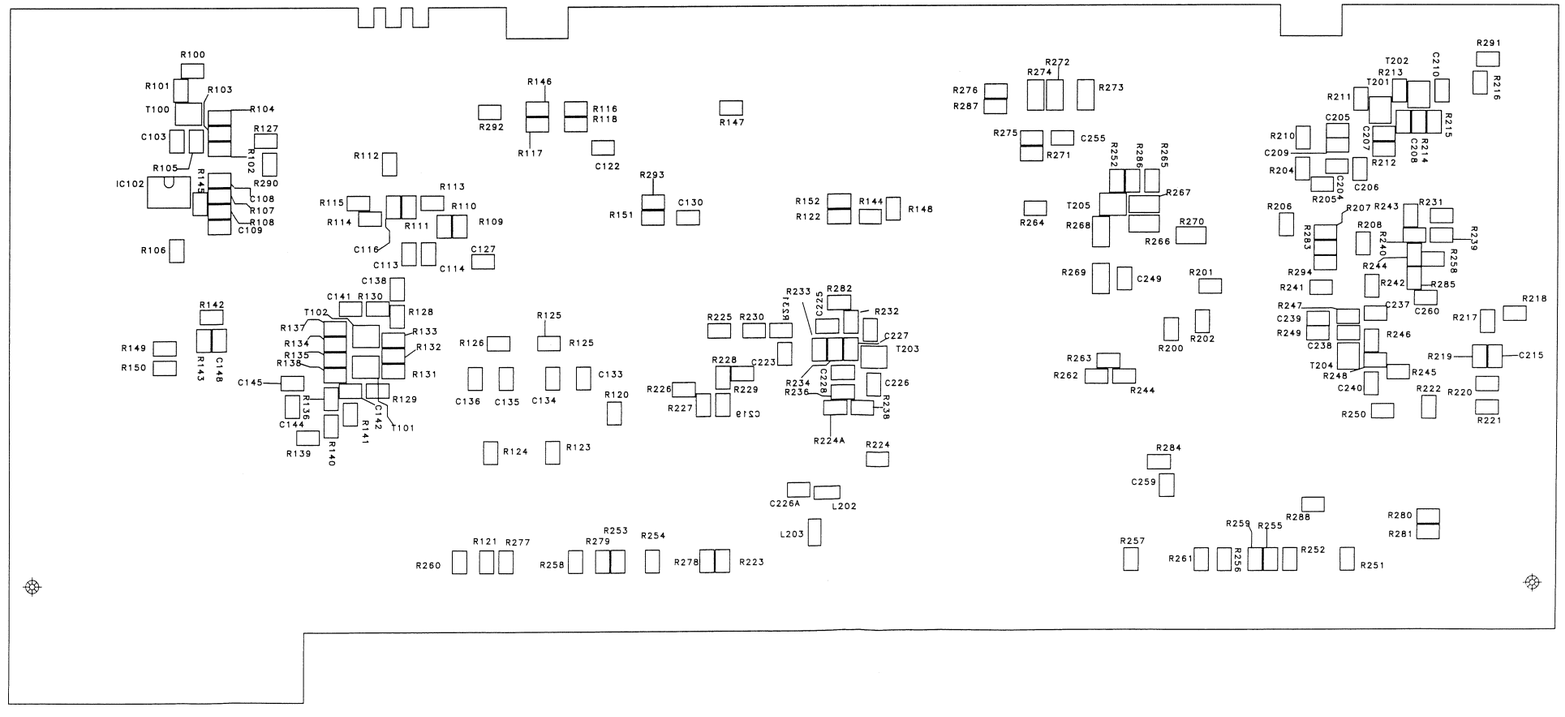
IC 203 Pin 2
Gen Lock Buchse/Socked (Black Burst)
Betrieb: Extern/Operating mode: external



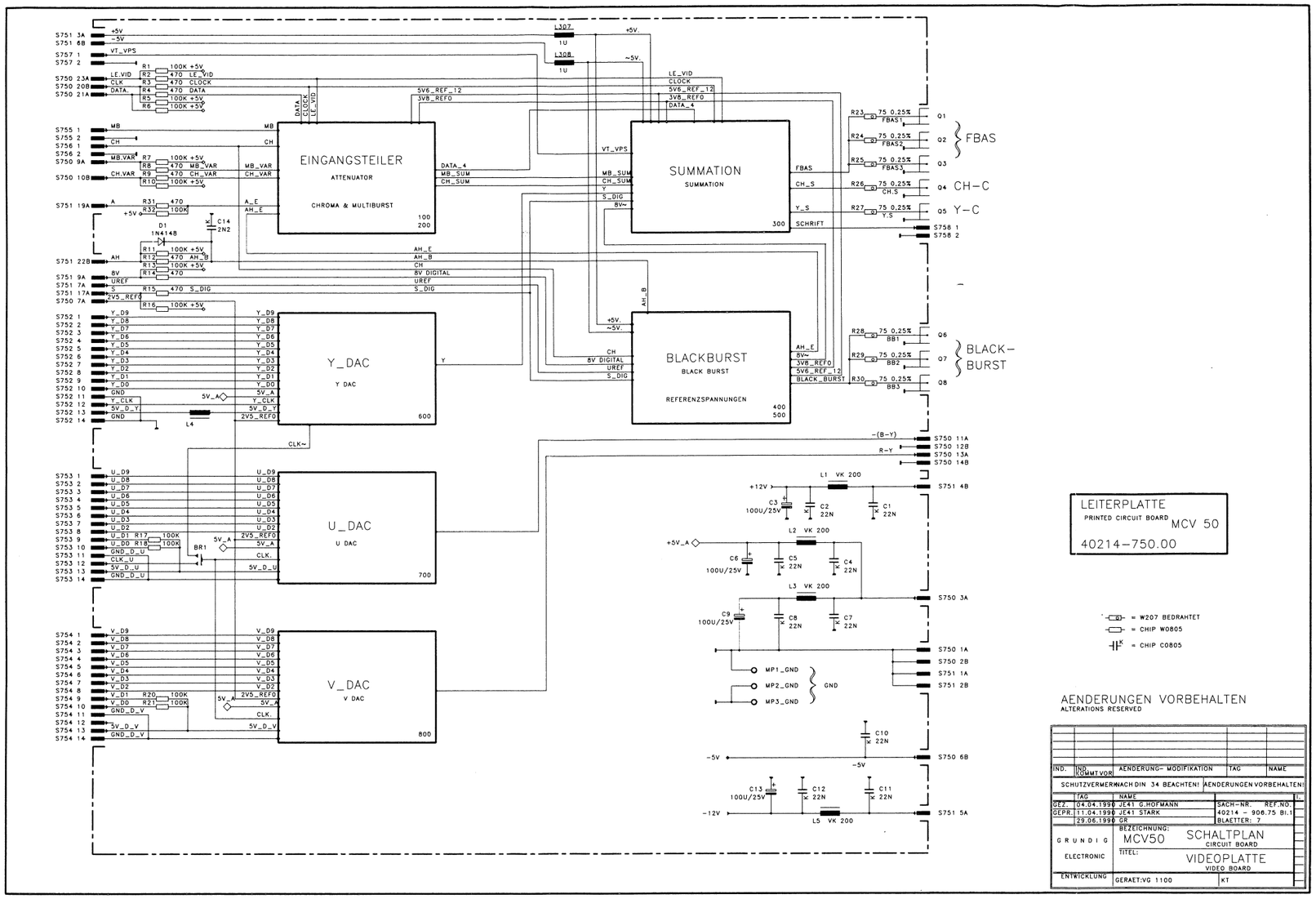
IC 217 Pin 9
Gen Lock Buchse/Socked (Black Burst)
Betrieb: Extern/Operating mode: external



Bestückungsseite / Component side



Lötseite / Soldering side



AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	INB. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
		SCHUTZVERMERK NACH DIN 34 BEACHTEN!	AENDERUNGEN VORBEHALTEN!	

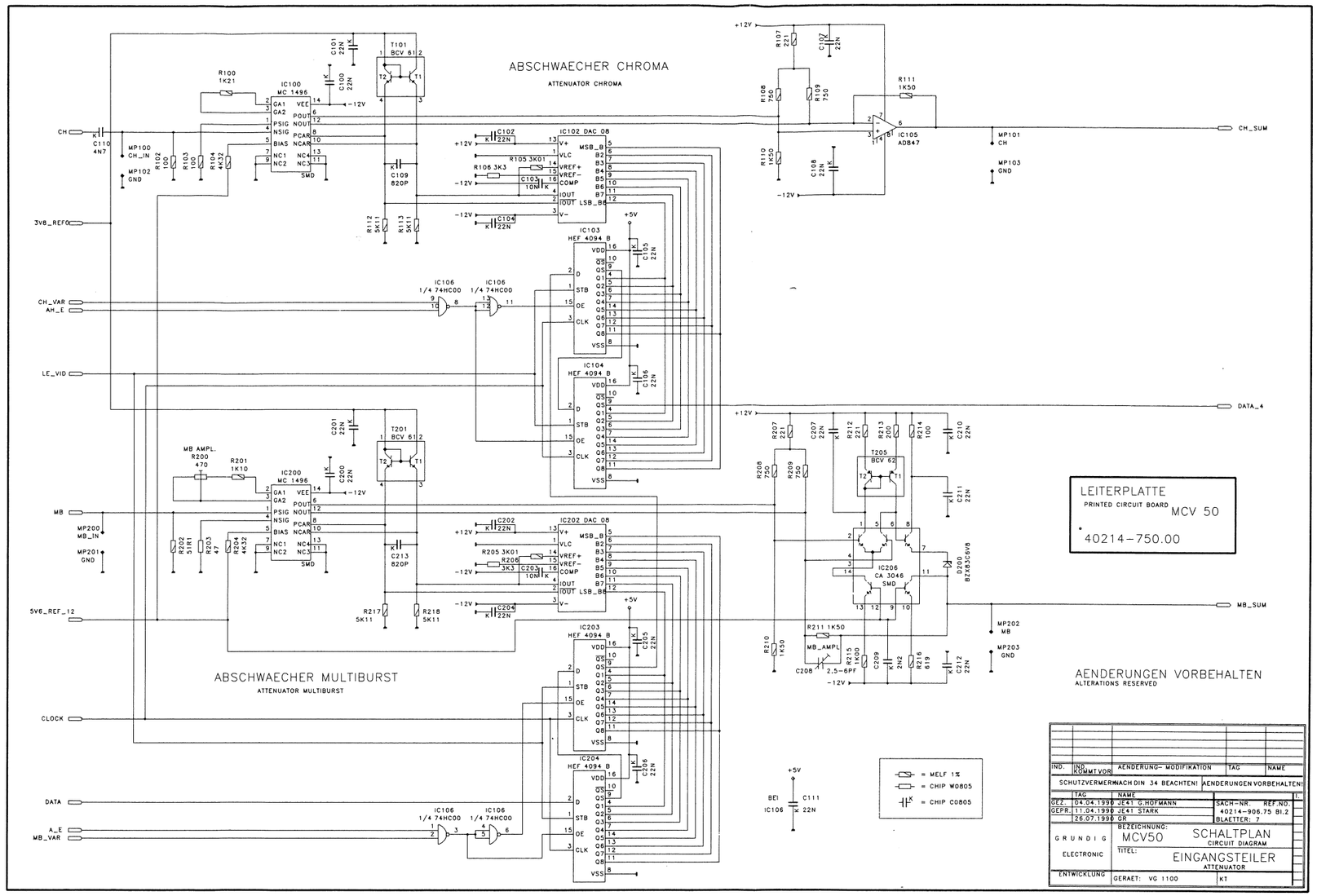
	TAG	NAME	
GEZ.	04.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO.: 40214 - 906.75 Bl.1
GEPR.	11.04.1990	JE41 STARK	
	29.06.1990	GR	BLAETTER: 7

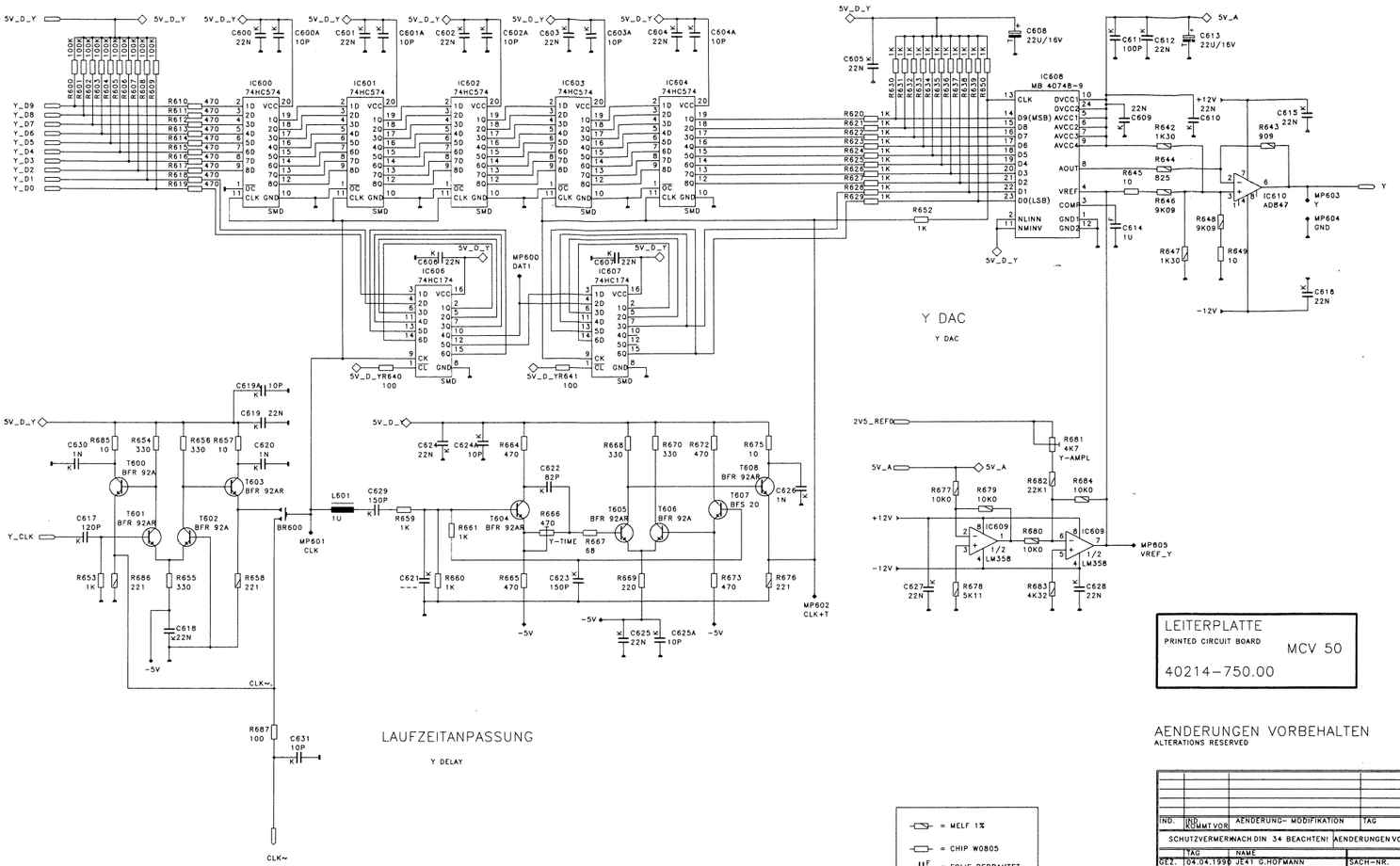
GRUNDIG ELECTRONIC

BEZEICHNUNG: MCV50 SCHALTPLAN CIRCUIT BOARD

TITEL: VIDEOPLATTE VIDEO BOARD

ENTWICKLUNG | GERAET:VG 1100 | KT


ABSCHWAECHER CHROMA
ATTENUATOR CHROMA
ABSCHWAECHER MULTIBURST
ATTENUATOR MULTIBURST
LEITERPLATTE
PRINTED CIRCUIT BOARD MCV 50
40214-750.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
= MELF 1%
= CHIP W0805
= CHIP C0805
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCV50 SCHALTPLAN CIRCUIT DIAGRAM
TITEL: EINGANGSTEILER ATTENUATOR
GERAET: VG 1100
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!
GEZ. 04.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
26.07.1990 GR
SACH-NR. 40214-906.75 BL.2
BLAETTER: 7



LEITERPLATTE
PRINTED CIRCUIT BOARD
MCV 50
40214-750.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	IND KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME

SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!

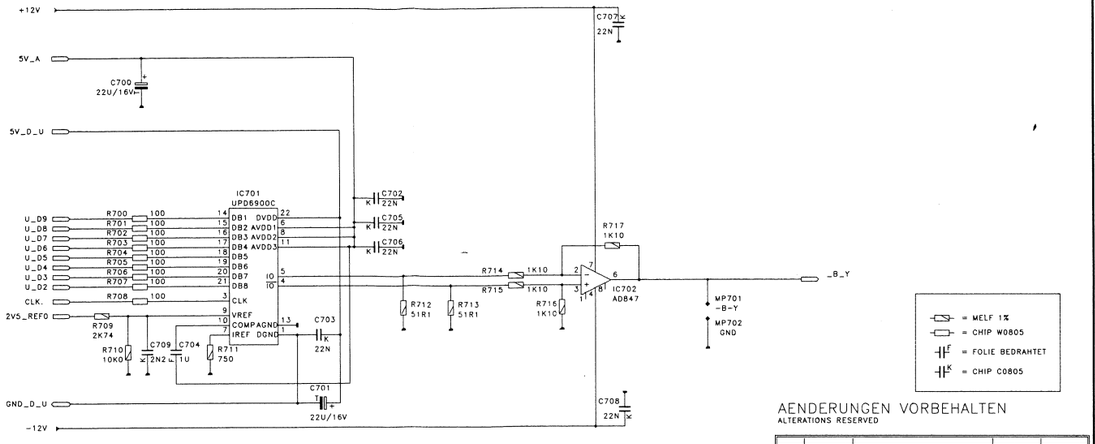
	TAG	NAME	
GEZ.	04.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO. 40214-906.75 Bl.3
GEPR.	11.04.1990	JE41 STARK	BLAETTER: 7
	10.07.1990	GR	

GRUNDIG ELECTRONIC

BEZEICHNUNG: MCV50 SCHALTPLAN
CIRCUIT DIAGRAM

TITEL: Y – DAC
Y DAC

ENTWICKLUNG | GERAET:VG 1100 | KT



AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	IND. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN!			AENDERUNGEN VORBEHALTEN!	

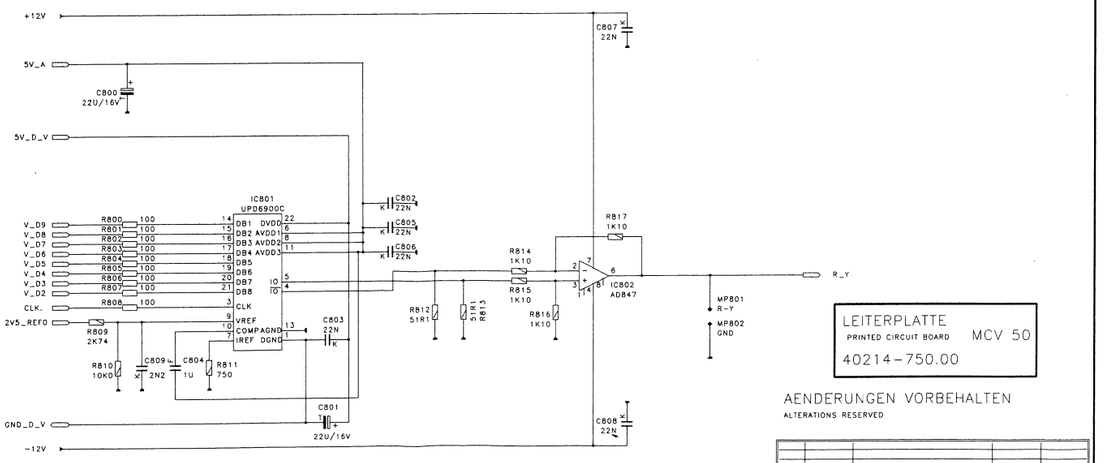
	TAG	NAME	
GEZ.	04.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO.
GEPR.	11.04.1990	JE41 STARK	40214-906.75 BI.4
	09.07.1990	GR	BLAETTER: 7

GRUNDIG ELECTRONIC

BEZEICHNUNG: MCV50 SCHALTPLAN
CIRCUIT DIAGRAM

TITEL: U – DAC
U_DAC

ENTWICKLUNG | GERAET: VG 1100 | KT



LEITERPLATTE
PRINTED CIRCUIT BOARD MCV 50
40214-750.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	IND. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN!			AENDERUNGEN VORBEHALTEN!	

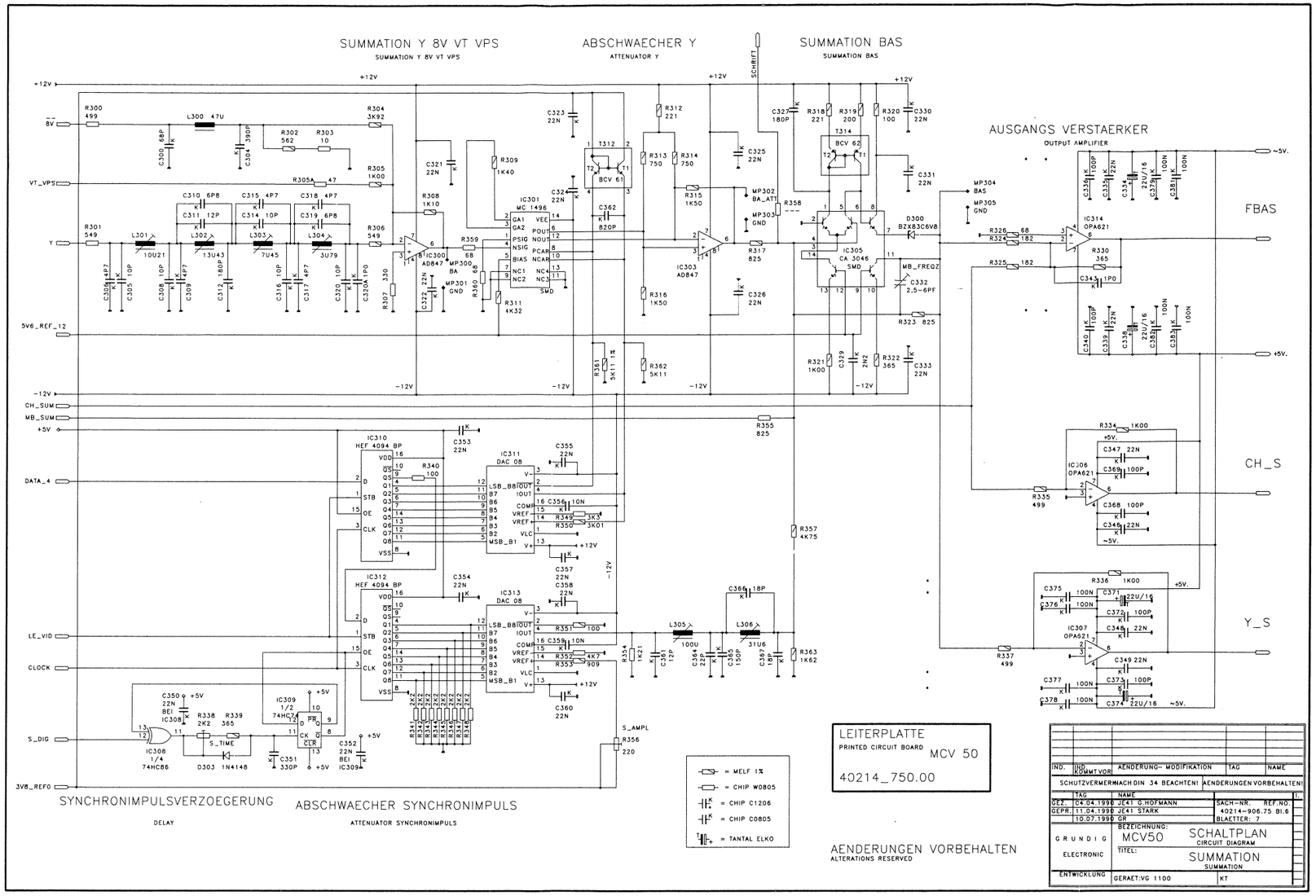
	TAG	NAME	
GEZ.	04.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO.
GEPR.	11.04.1990	JE41 STARK	40214-906.75 BI.5
	09.07.1990	GR	BLAETTER: 7

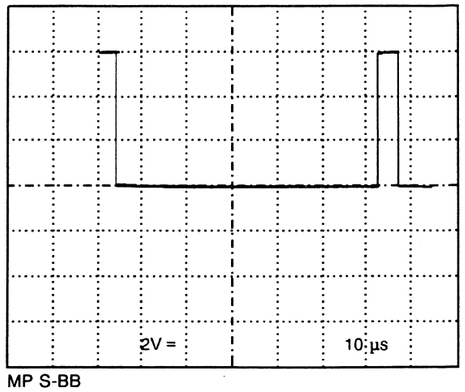
GRUNDIG ELECTRONIC

BEZEICHNUNG: MCV50 SCHALTPLAN
CIRCUIT DIAGRAM

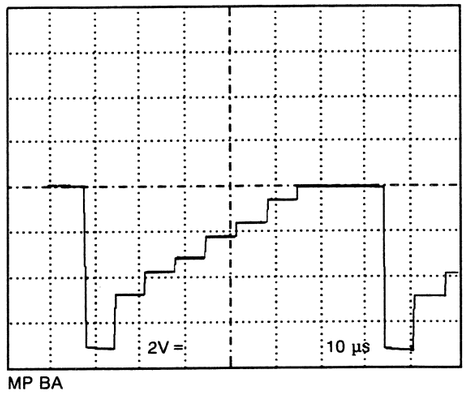
TITEL: V – DAC
V_DAC

ENTWICKLUNG | GERAET: VG 1100 | KT

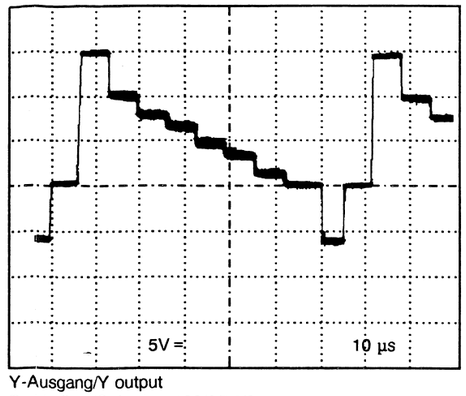

SUMMATION Y 8V VT VPS
SUMMATION Y 8V VT VPS
ABSCHWAECHER Y
ATTENUATOR Y
SUMMATION BAS
SUMMATION BAS
SCHNITT
AUSGANGS VERSTAERKER
OUTPUT AMPLIFIER
FBAS
CH_S
Y_S
+12V
-12V
+5V
~5V.
8V
VT_VPS
Y
5V6_REF_12
CH_SUM
MB_SUM
DATA_4
LE_VID
CLOCK
3V8_REF0
S_DIG
S_AMPL
S_TIME
IC300 AD847
IC301 MC 1496
IC303 AD847
IC305 CA 3046 SMD
IC306 OPA621
IC307 OPA621
IC308 1/4 74HC86
IC309 1/2 74HC74
IC310 HEF 4094 BP
IC311 DAC 08
IC312 HEF 4094 BP
IC313 DAC 08
IC314 OPA621
D300 BZX83C6V8
D303 1N4148
T312 BCV 61
T314 BCV 62
MP300 BA
MP301 GND
MP302 BA_ATT
MP303 GND
MP304 BAS
MP305 GND
MB_FREQ
SYNCHRONIMPULSVERZOEGERUNG
DELAY
ABSCHWAECHER SYNCHRONIMPULS
ATTENUATOR SYNCHRONIMPULS
= MELF 1%
= CHIP W0805
= CHIP C1206
= CHIP C0805
= TANTAL ELKO
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCV 50
40214_750.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
IND. INH. KOMMT VOR
AENDERUNG- MODIFIKATION
TAG
NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!
GEZ. 04.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
10.07.1990 GR
SACH-NR. 40214-906.75 BI.6
BLAETTER: 7
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCV50 SCHALTPLAN
CIRCUIT DIAGRAM
TITEL: SUMMATION
SUMMATION
ENTWICKLUNG
GERAET:VG 1100
KT



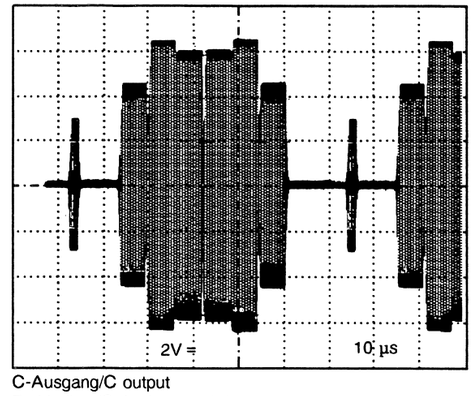
MP S-BB



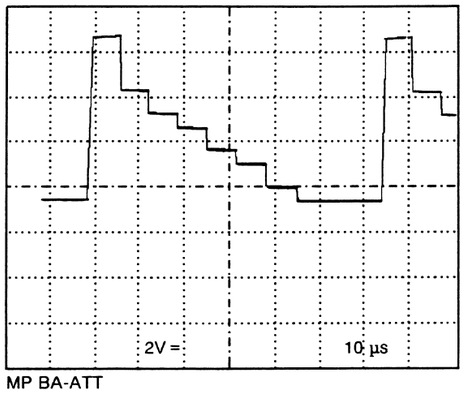
MP BA
Farbbalken/Color bar 100/0/75/0



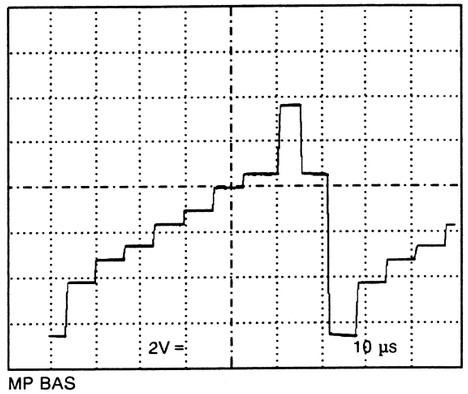
Y-Ausgang/Y output
Farbbalken/Color bar 100/0/75/0



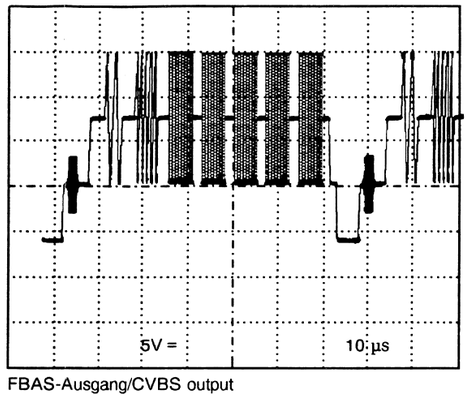
C-Ausgang/C output
Farbbalken/Color bar 100/0/75/0



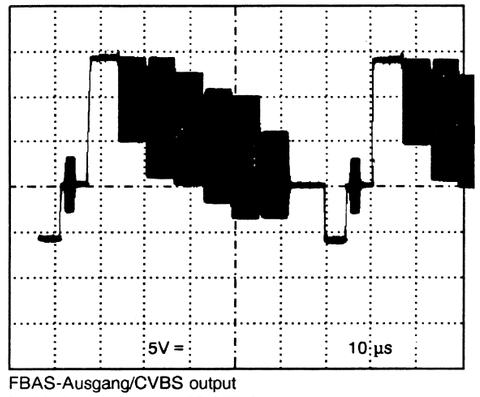
MP BA-ATT
Farbbalken/Color bar 100/0/75/0



MP BAS
Farbbalken/Color bar 100/0/75/0

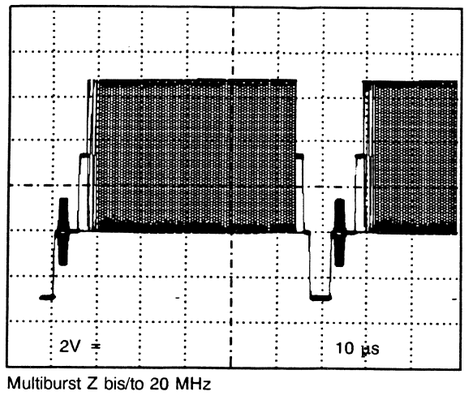


FBAS-Ausgang/CVBS output
Multiburst 0,5 bis/to 6 MHz

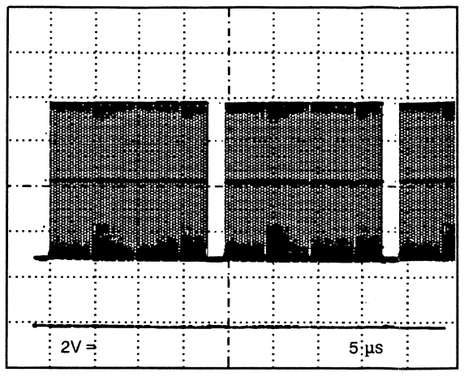


FBAS-Ausgang/CVBS output
Farbbalken/Color bar 100/0/75/0

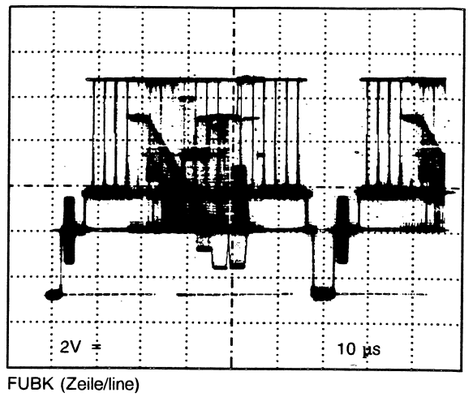
Oszillogramme der Ausgangssignale (FBAS-Ausgang)/Oscillograms of the output signals (CVBS output)



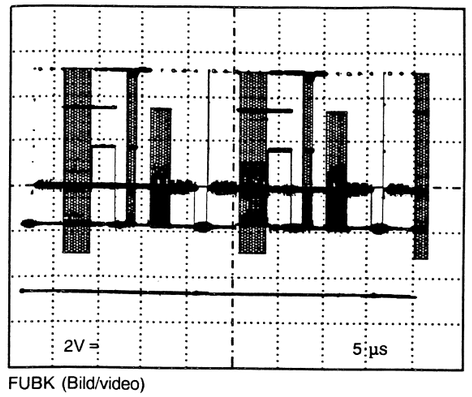
Multiburst Z bis/to 20 MHz



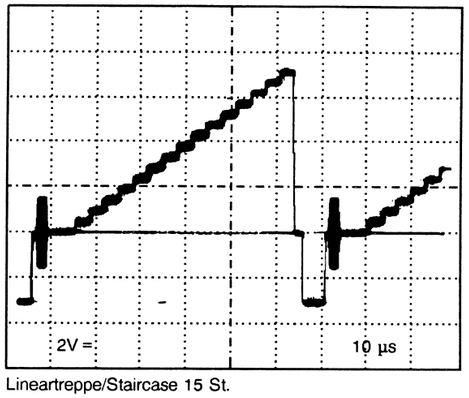
Multiburst B bis/to 20 MHz



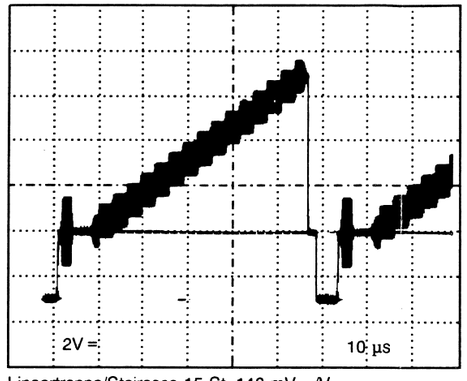
FUBK (Zeile/line)



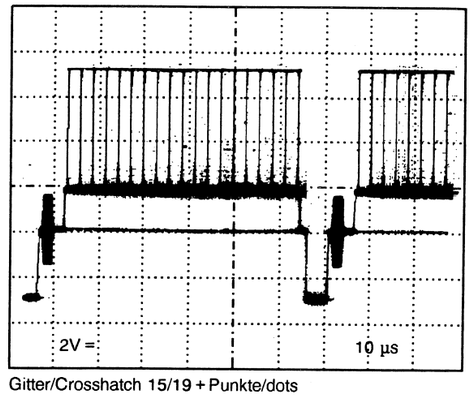
FUBK (Bild/video)



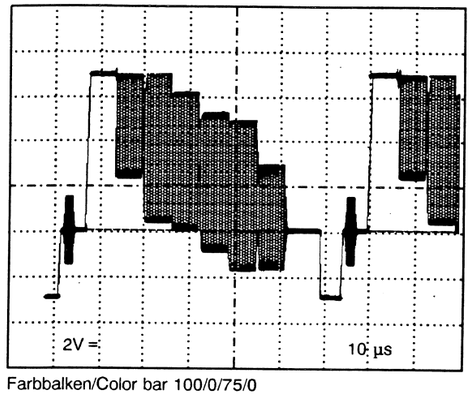
Lineartreppe/Staircase 15 St.



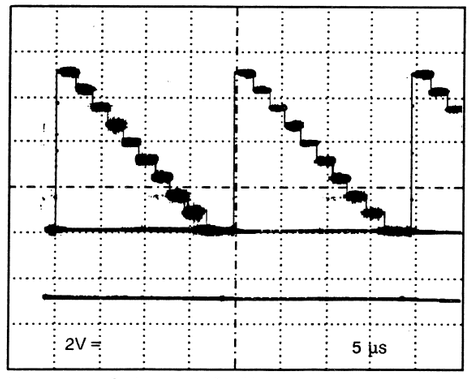
Lineartreppe/Staircase 15 St. 140 mV_{ss} /V_{pp}



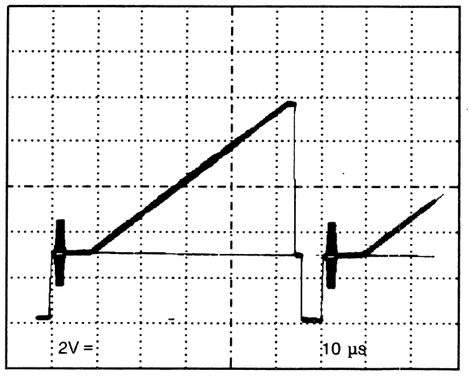
Gitter/Crosshatch 15/19 + Punkte/dots



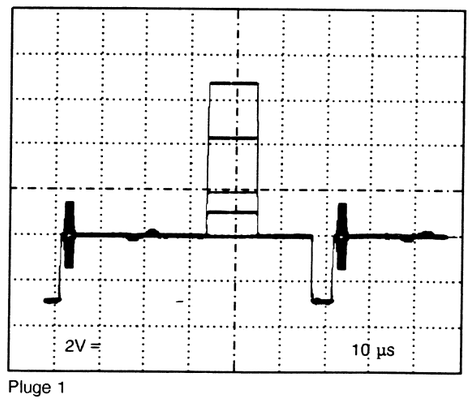
Farbbalken/Color bar 100/0/75/0



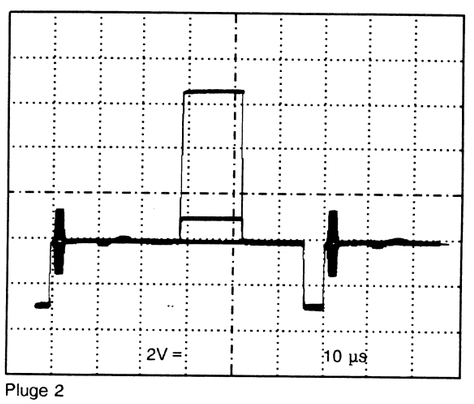
Lineartreppe/Staircase 10 St. /H



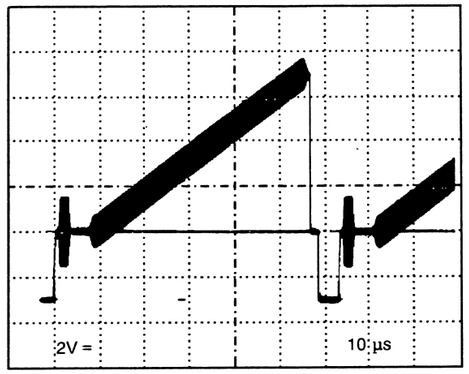
du/dt +



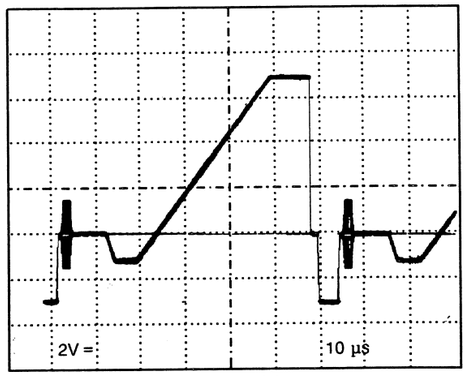
Pluge 1



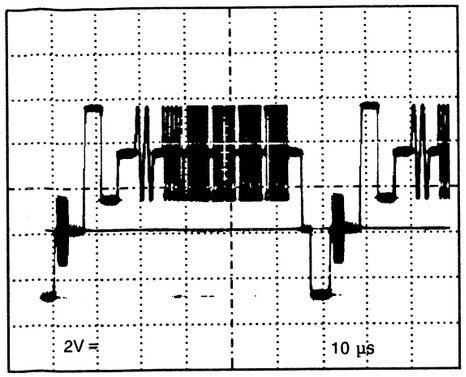
Pluge 2



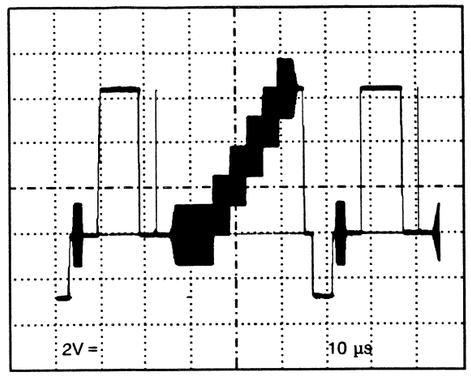
du/dt + /140 mV_{ss} /V_{pp}



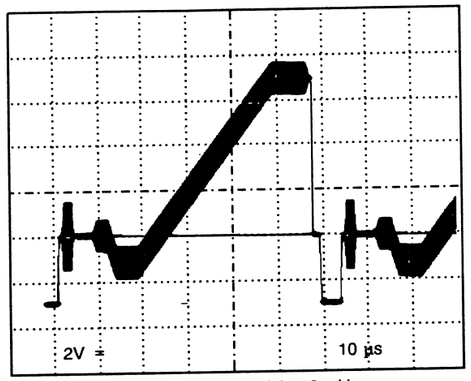
Sägezahn Spezial/Sawtooth special



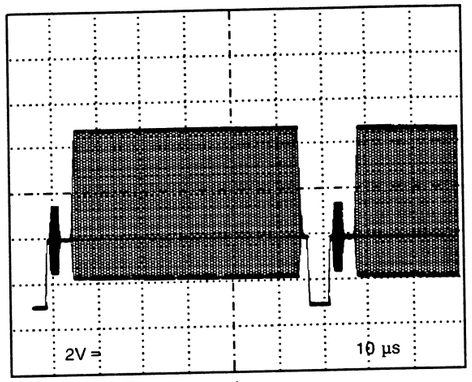
Prüfzeile 18/ITS 18



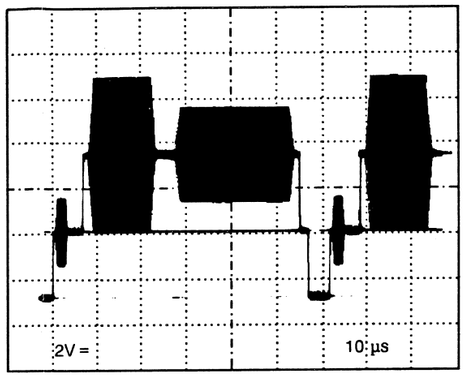
Prüfzeile 330/ITS 330



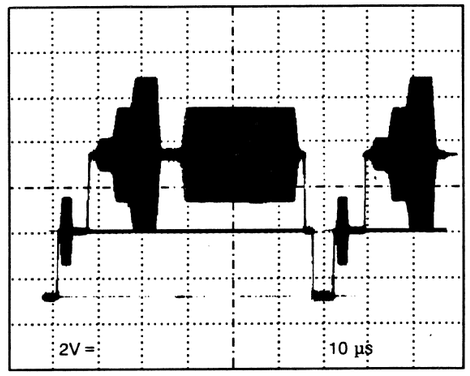
Sägezahn Spezial/Sawtooth special 140 mV_{ss}



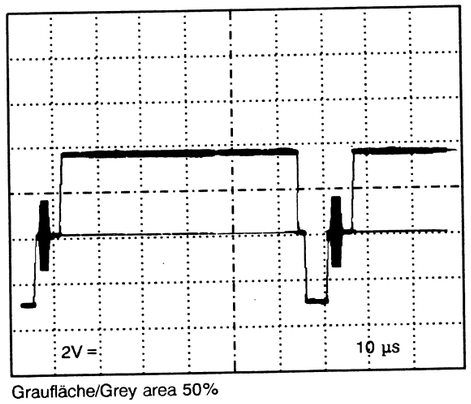
Farbfläche Rot/Color area red



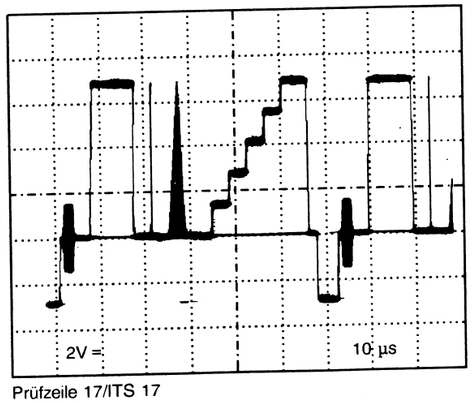
Prüfzeile 331/ITS 331



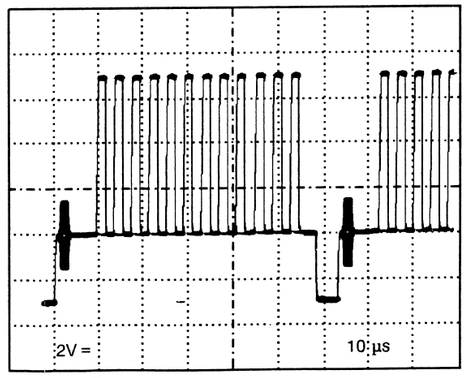
Prüfzeile 331a/ITS 331a



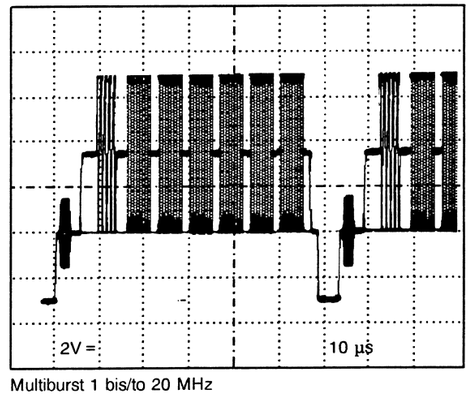
Graufläche/Grey area 50%



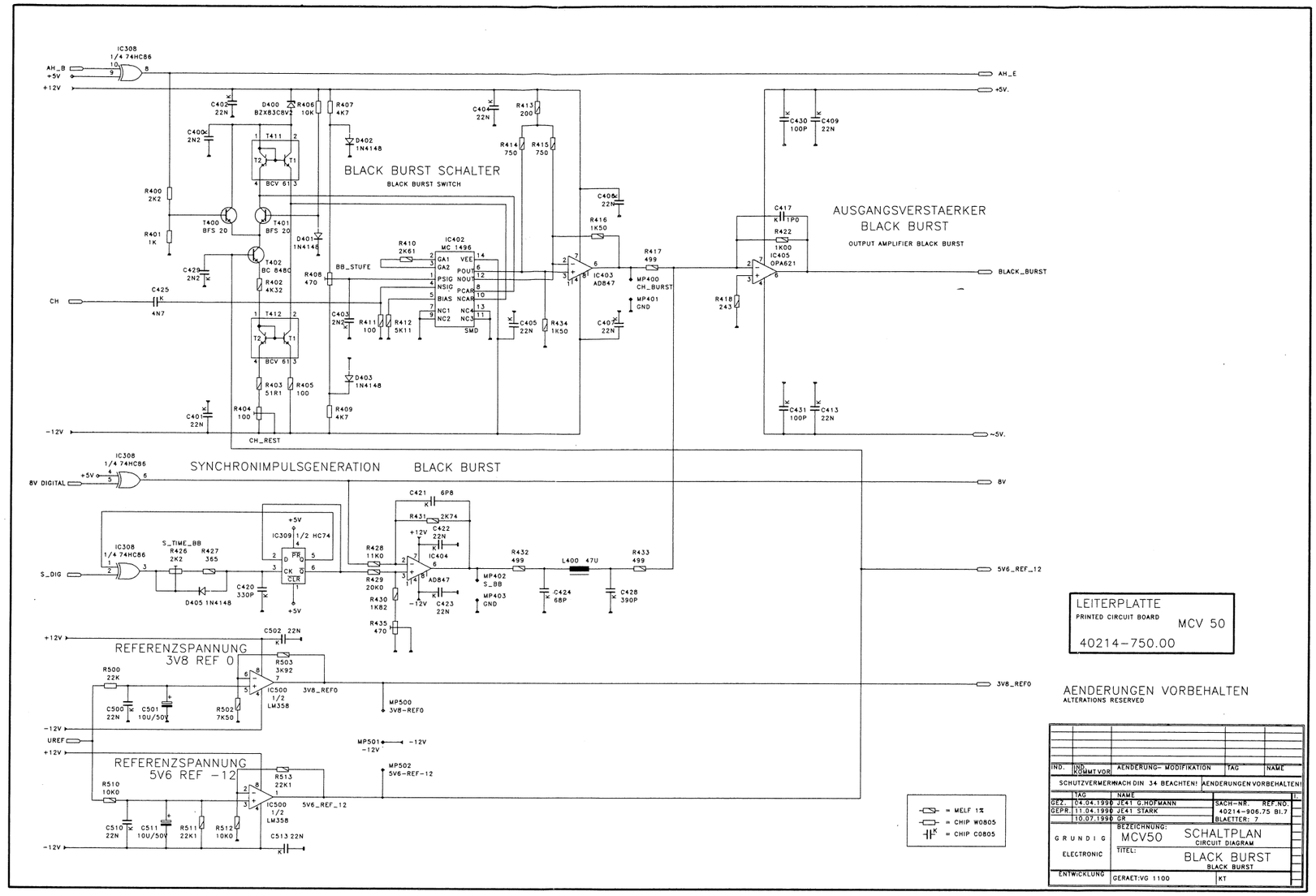
Prüfzeile 17/ITS 17



250 KHz 2T



Multiburst 1 bis/to 20 MHz



LEITERPLATTE
PRINTED CIRCUIT BOARD
MCV 50
40214-750.00

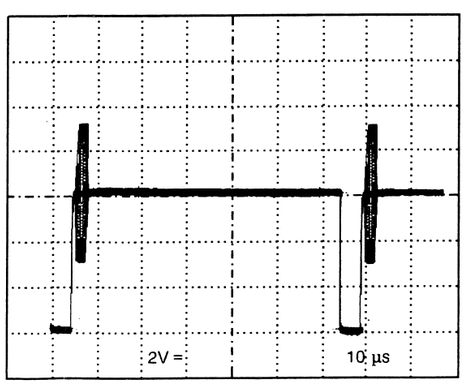
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	IND. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN! AENDERUNGEN VORBEHALTEN!				

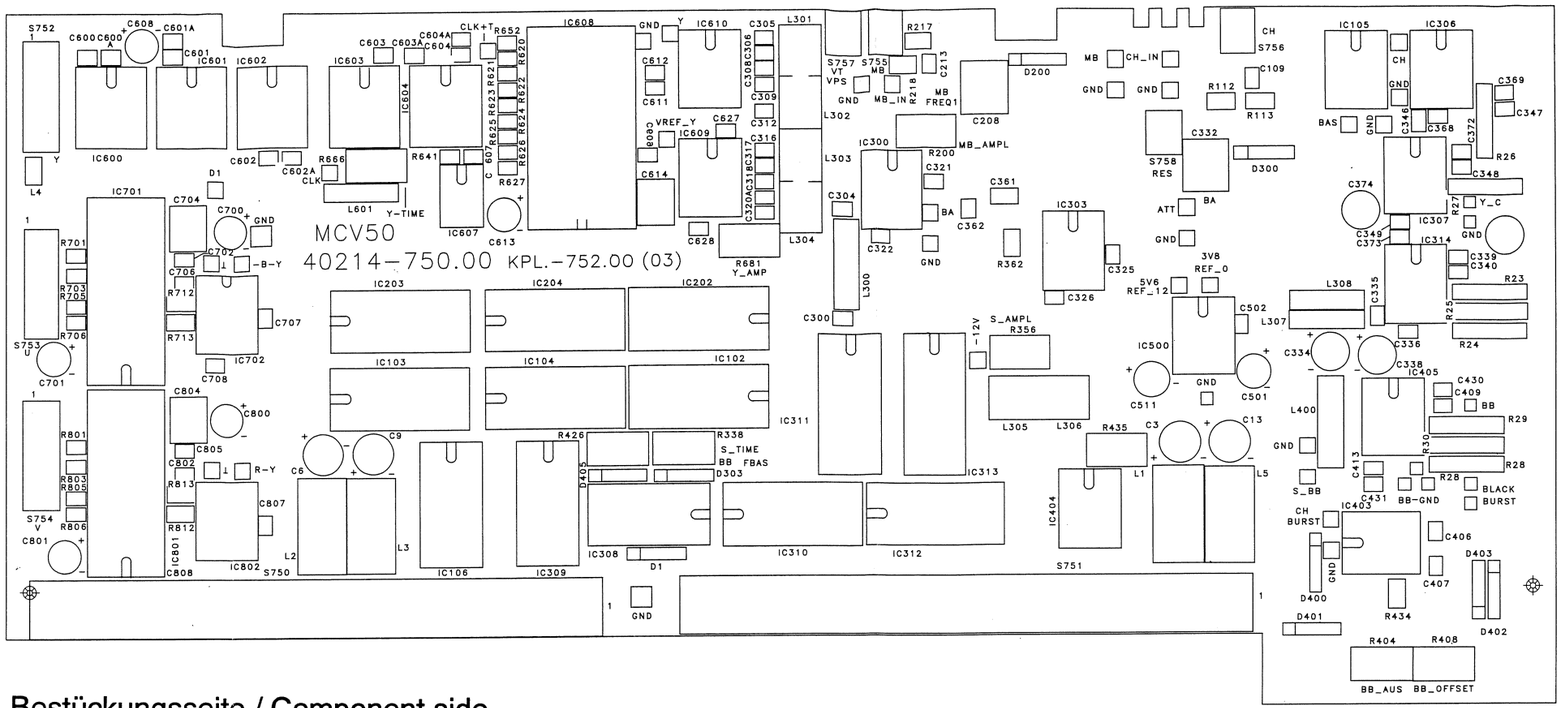
	TAG	NAME	
GEZ.	04.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO. 40214-906.75 BI.7
GEPR.	11.04.1990	JE41 STARK	BLAETTER: 7
	10.07.1990	GR	

GRUNDIG ELECTRONIC
ENTWICKLUNG

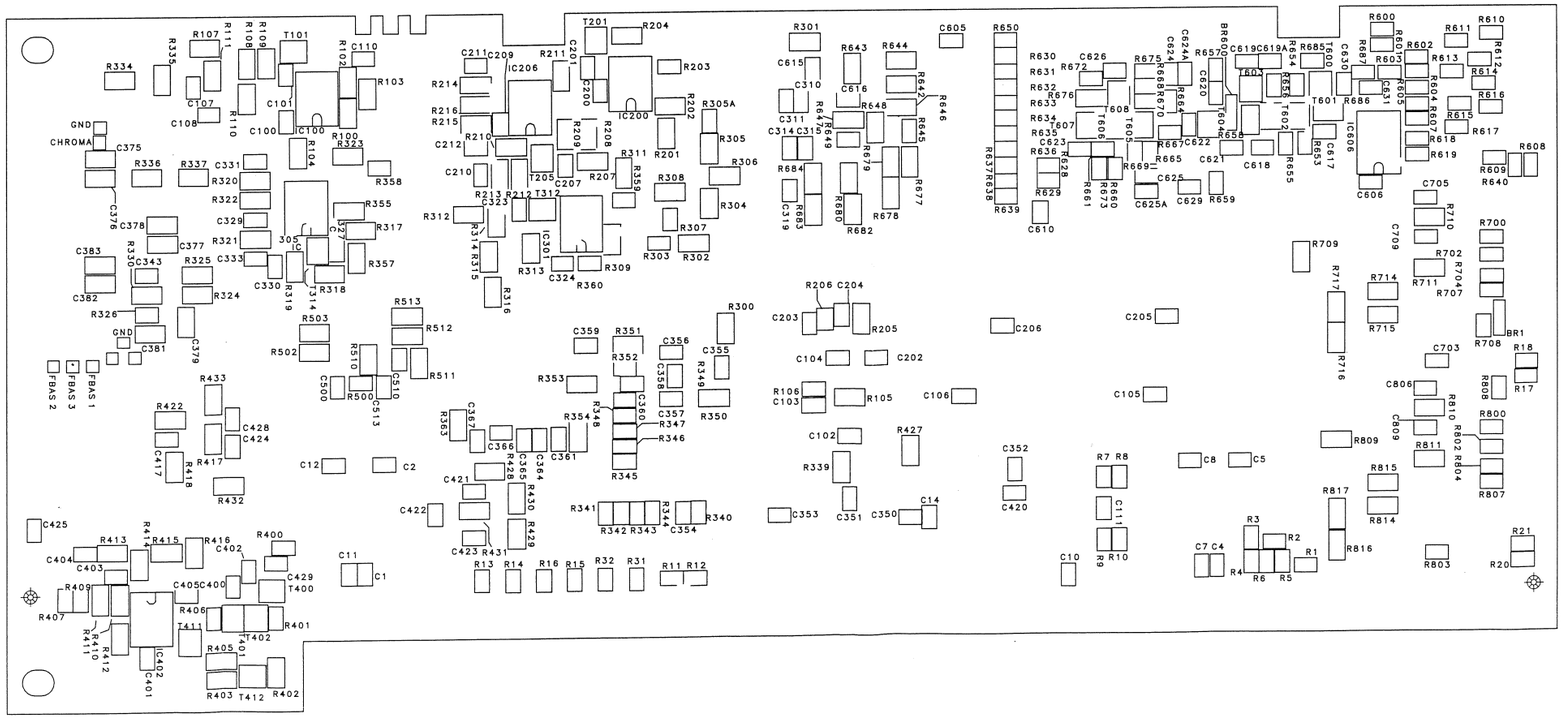
BEZEICHNUNG: MCV50 SCHALTPLAN CIRCUIT DIAGRAM
TITEL: BLACK BURST BLACK BURST
GERAET:VG 1100 KT



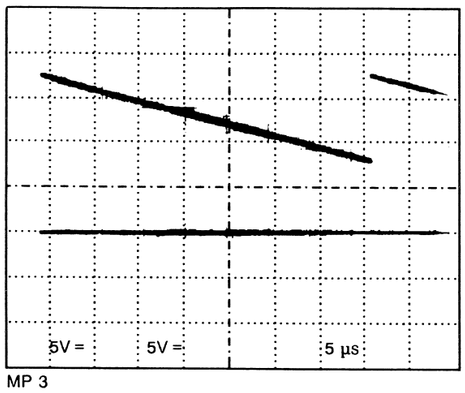
Black-Burst-Ausgang/Black burst output



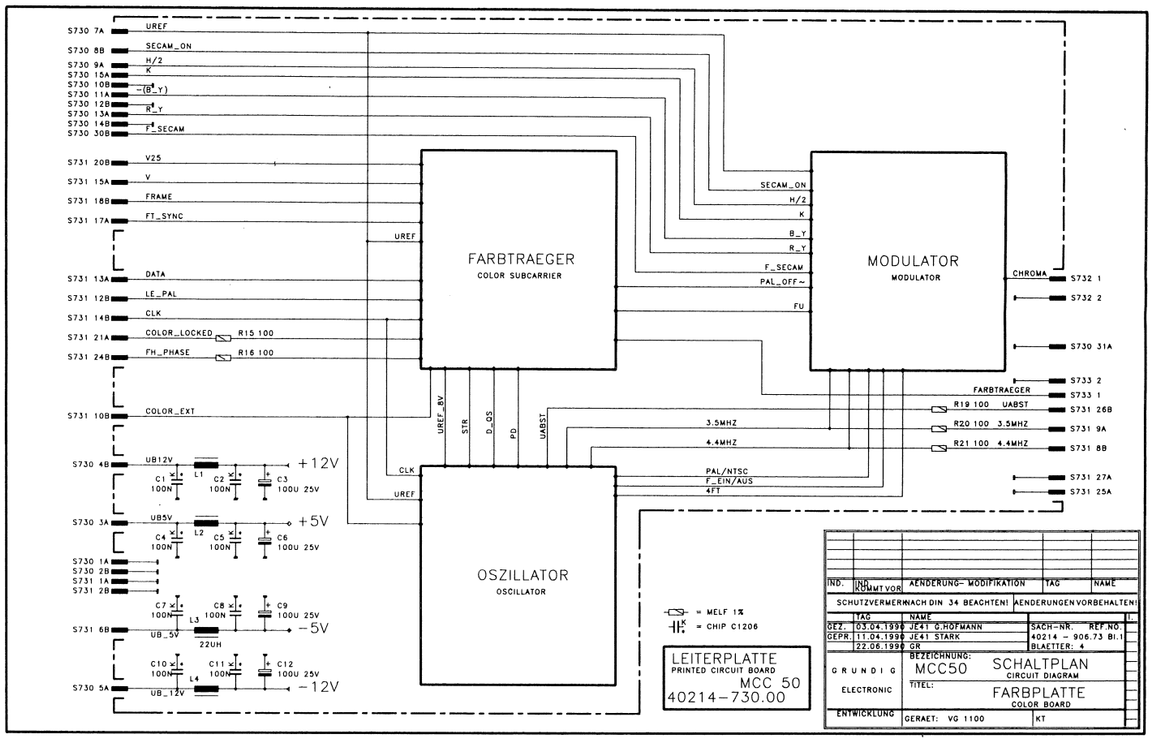
Bestückungsseite / Component side

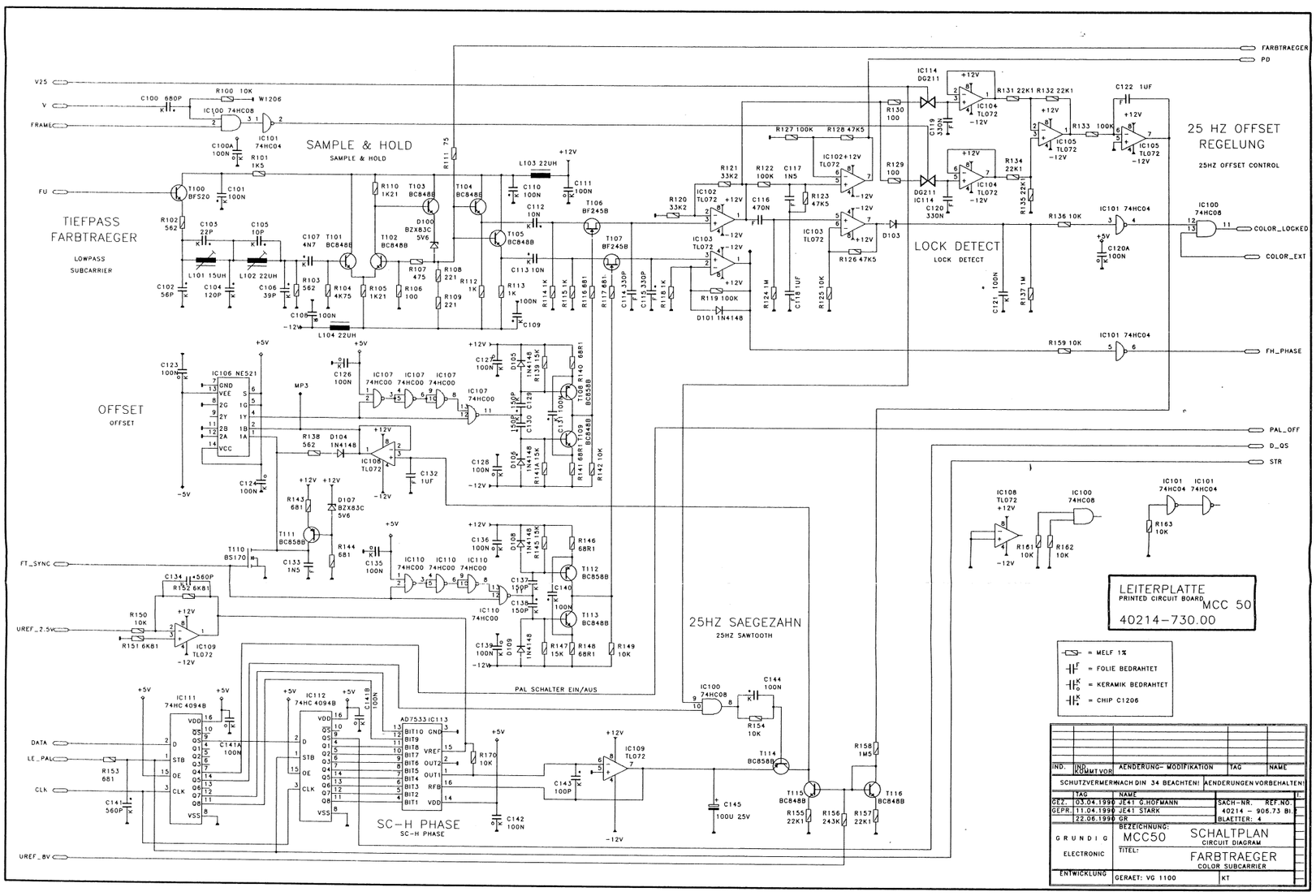


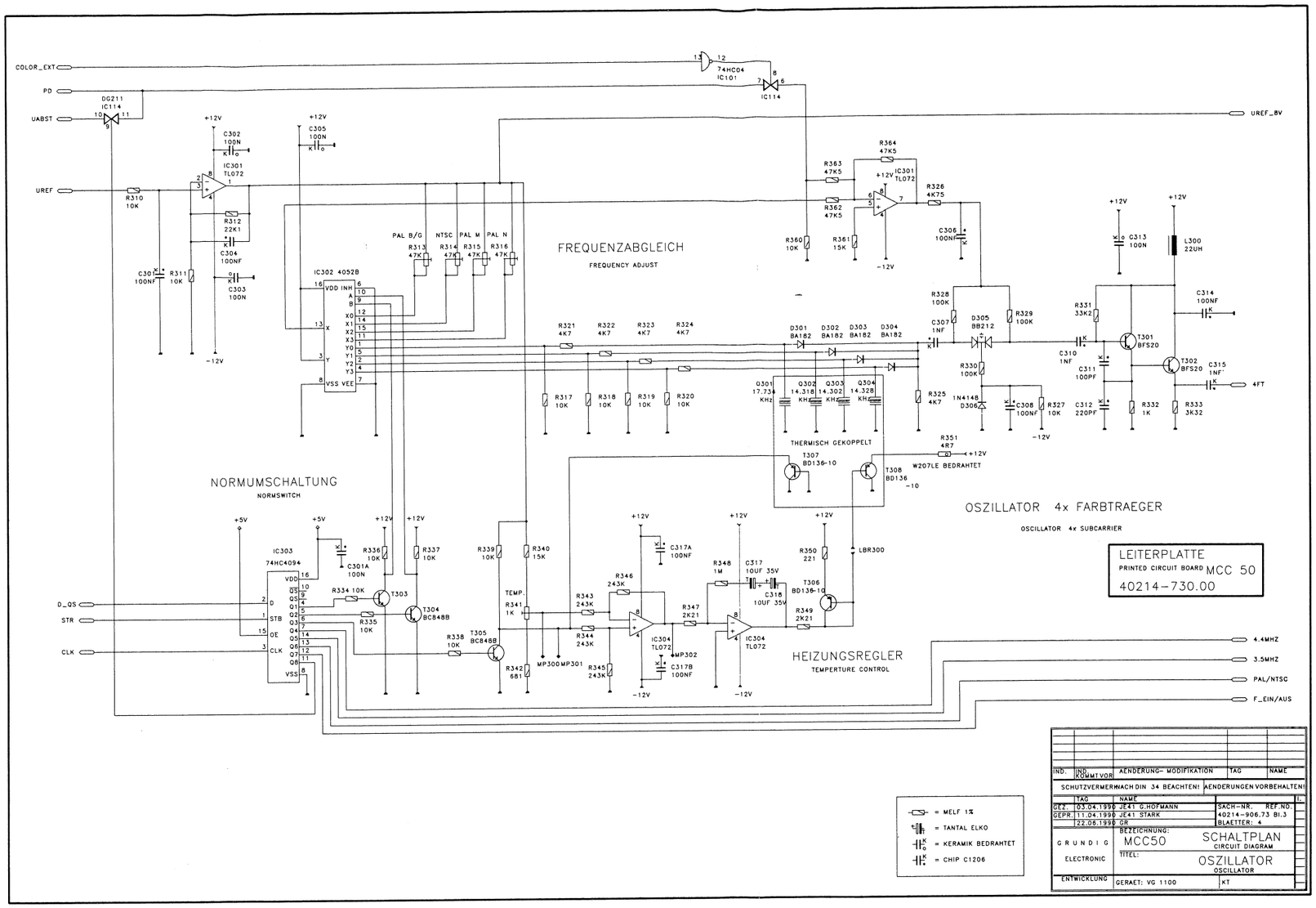
Lötseite / Soldering side

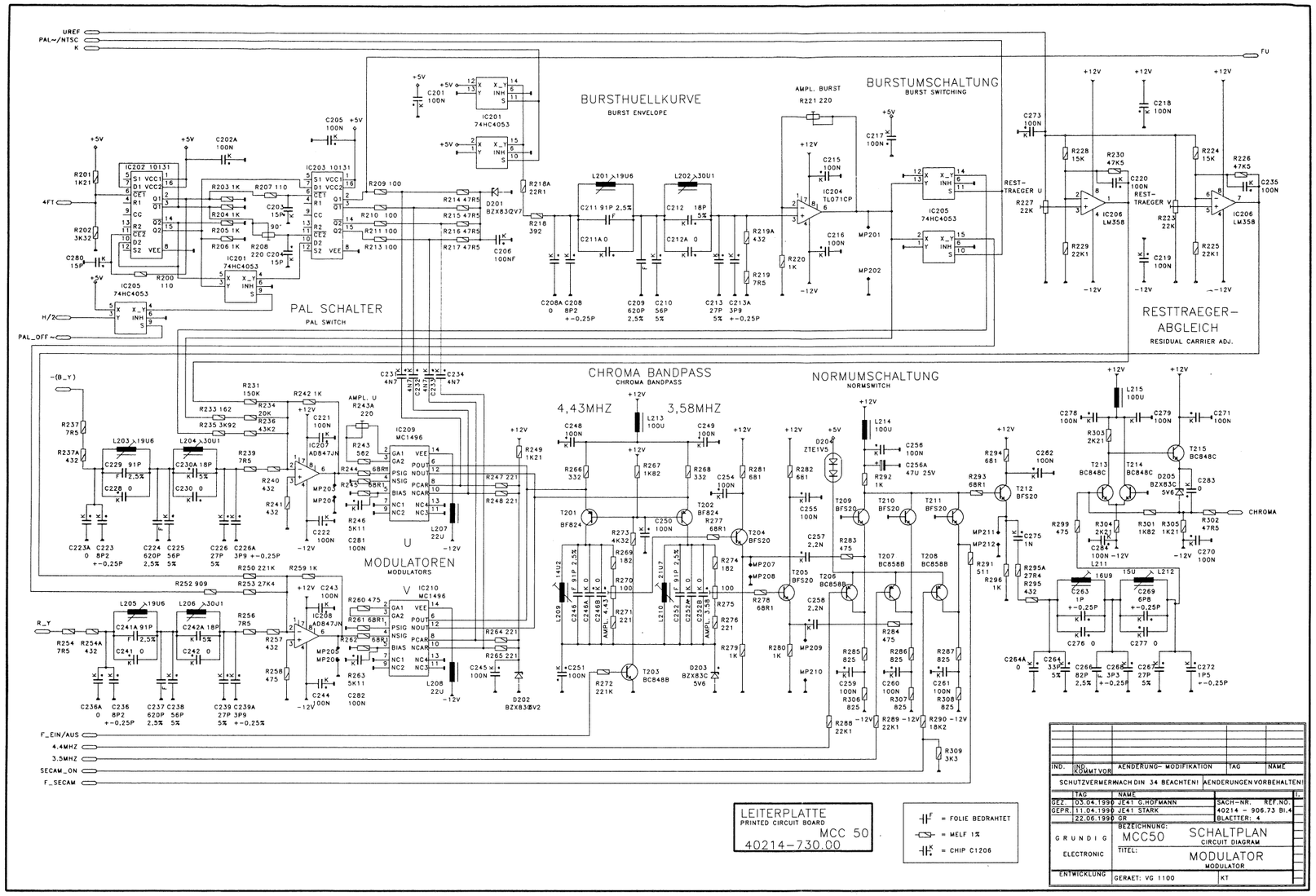


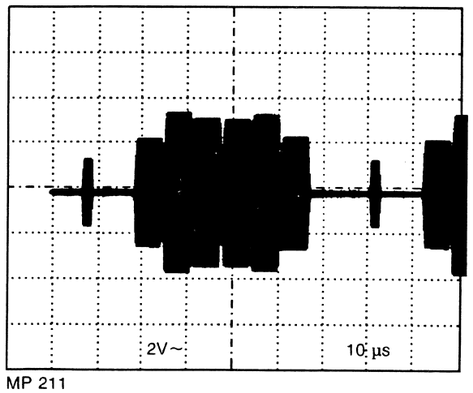
MP 3
IC 100 Pin 9 (V 25-Impuls/V 25 pulse)
Betriebsart: Intern/Operating mode: internal



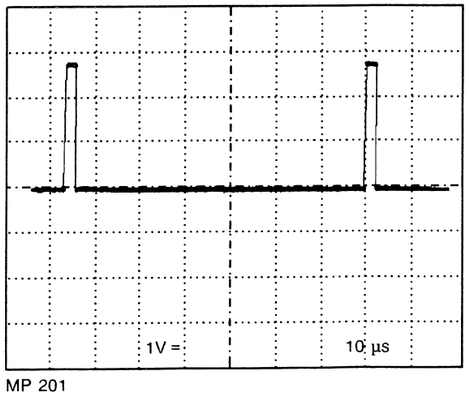



COLOR_EXT
PD
UABST
UREF
UREF_8V
74HC04 IC101
DG211 IC114
IC114
IC301 TL072
C302 100N
C305 100N
R310 10K
R311 10K
R312 22K1
C304 100NF
C303 100N
C301 100NF
+12V
-12V
IC302 4052B
VDD INH A B X0 X1 X2 X3 Y0 Y1 Y2 Y3 VSS VEE
PAL B/G
NTSC
PAL M
PAL N
R313 47K
R314 47K
R315 47K
R316 47K
FREQUENZABGLEICH
FREQUENCY ADJUST
R321 4K7
R322 4K7
R323 4K7
R324 4K7
R317 10K
R318 10K
R319 10K
R320 10K
R363 47K5
R364 47K5
R362 47K5
R360 10K
R361 15K
R326 4K75
C306 100NF
R328 100K
R329 100K
C307 1NF
D305 BB212
R330 100K
D301 BA182
D302 BA182
D303 BA182
D304 BA182
Q301 17.734 KHz
Q302 14.318 KHz
Q303 14.302 KHz
Q304 14.328 KHz
R325 4K7
1N4148 D306
C308 100NF
R327 10K
THERMISCH GEKOPPELT
R351 4R7
W207LE BEDRAHTET
T307 BD136-10
T308 BD136-10
C313 100N
L300 22UH
C314 100NF
R331 33K2
T301 BFS20
T302 BFS20
C310 1NF
C311 100PF
C315 1NF
C312 220PF
R332 1K
R333 3K32
4FT
NORMUMSCHALTUNG
NORMSWITCH
IC303 74HC4094
D_QS
STR
CLK
R336 10K
R337 10K
C301A 100N
R334 10K
R335 10K
T303
T304 BC848B
T305 BC848B
R338 10K
R339 10K
R340 15K
TEMP.
R341 1K
R342 681
MP300
MP301
R343 243K
R344 243K
R345 243K
R346 243K
IC304 TL072
MP302
C317A 100NF
C317B 100NF
R347 2K21
R348 1M
C317 10UF 35V
C318 10UF 35V
R349 2K21
T306 BD136-10
R350 221
LBR300
OSZILLATOR 4x FARBTRAEGER
OSCILLATOR 4x SUBCARRIER
HEIZUNGSREGLER
TEMPERTURE CONTROL
4.4MHZ
3.5MHZ
PAL/NTSC
F_EIN/AUS
LEITERPLATTE
PRINTED CIRCUIT BOARD MCC 50
40214-730.00
= MELF 1%
= TANTAL ELKO
= KERAMIK BEDRAHTET
= CHIP C1206
IND. KOMMT VOR
AENDERUNG- MODIFIKATION
TAG
NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN!
AENDERUNGEN VORBEHALTEN!
GEZ. 03.04.1990 JE41 G.HOFMANN
GEPR. 11.04.1990 JE41 STARK
22.06.1990 GR
SACH-NR. REF.NO. 40214-906.73 BI.3
BLAETTER: 4
GRUNDIG ELECTRONIC
BEZEICHNUNG: MCC50 SCHALTPLAN
CIRCUIT DIAGRAM
TITEL: OSZILLATOR
OSCILLATOR
ENTWICKLUNG
GERAET: VG 1100
KT

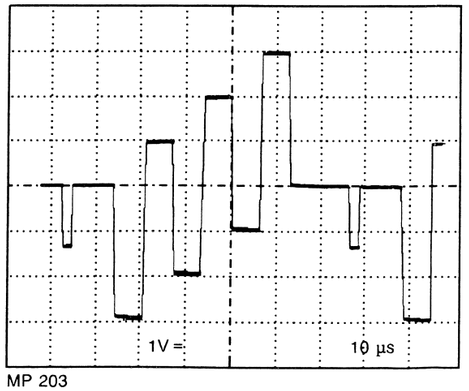




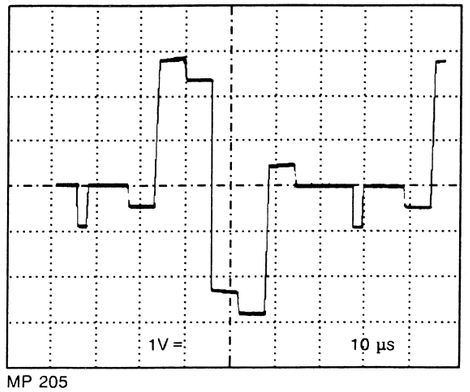
MP 211
Farbbalken/Color bar 100/0/75/0



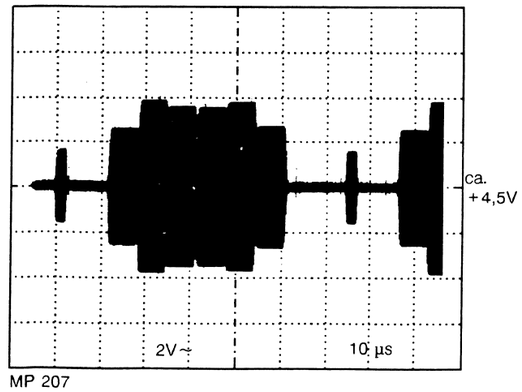
MP 201



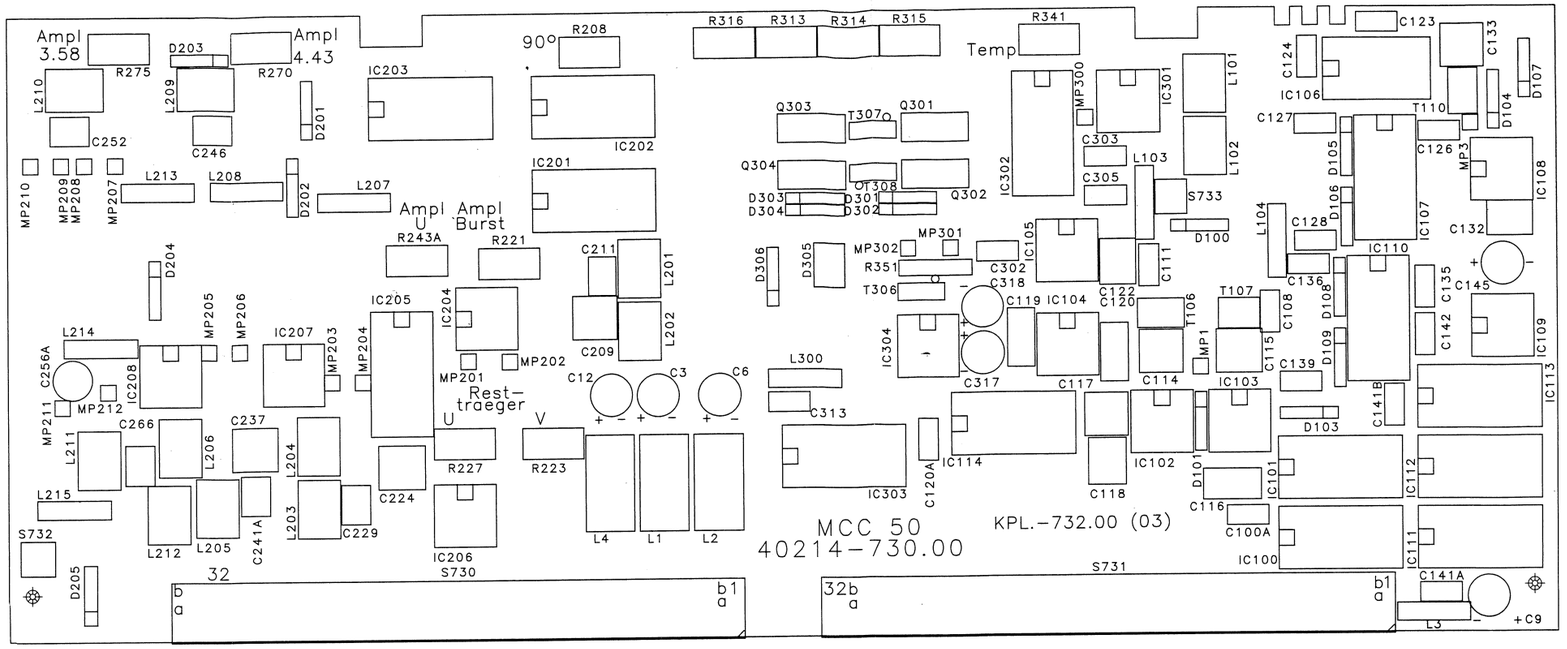
MP 203
Farbbalken/Color bar 100/0/75/0



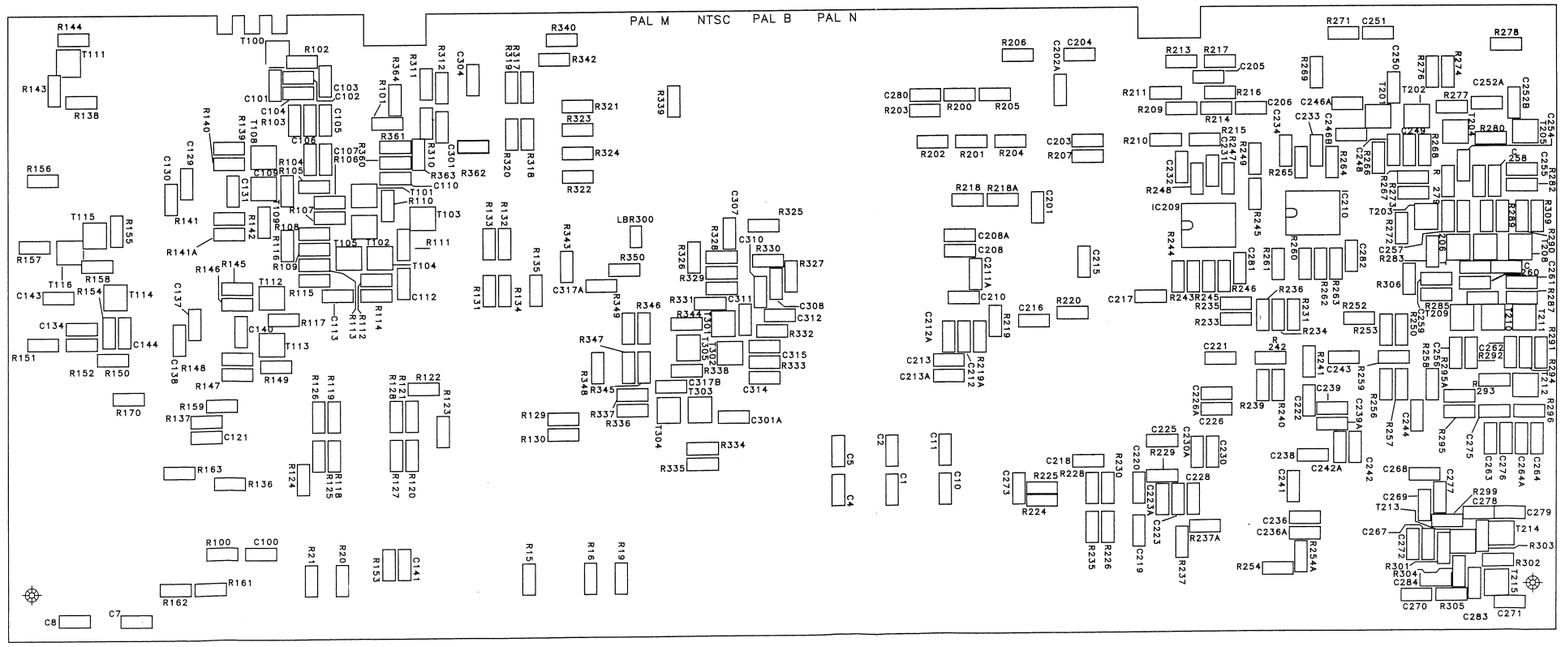
MP 205
Farbbalken/Color bar 100/0/75/0



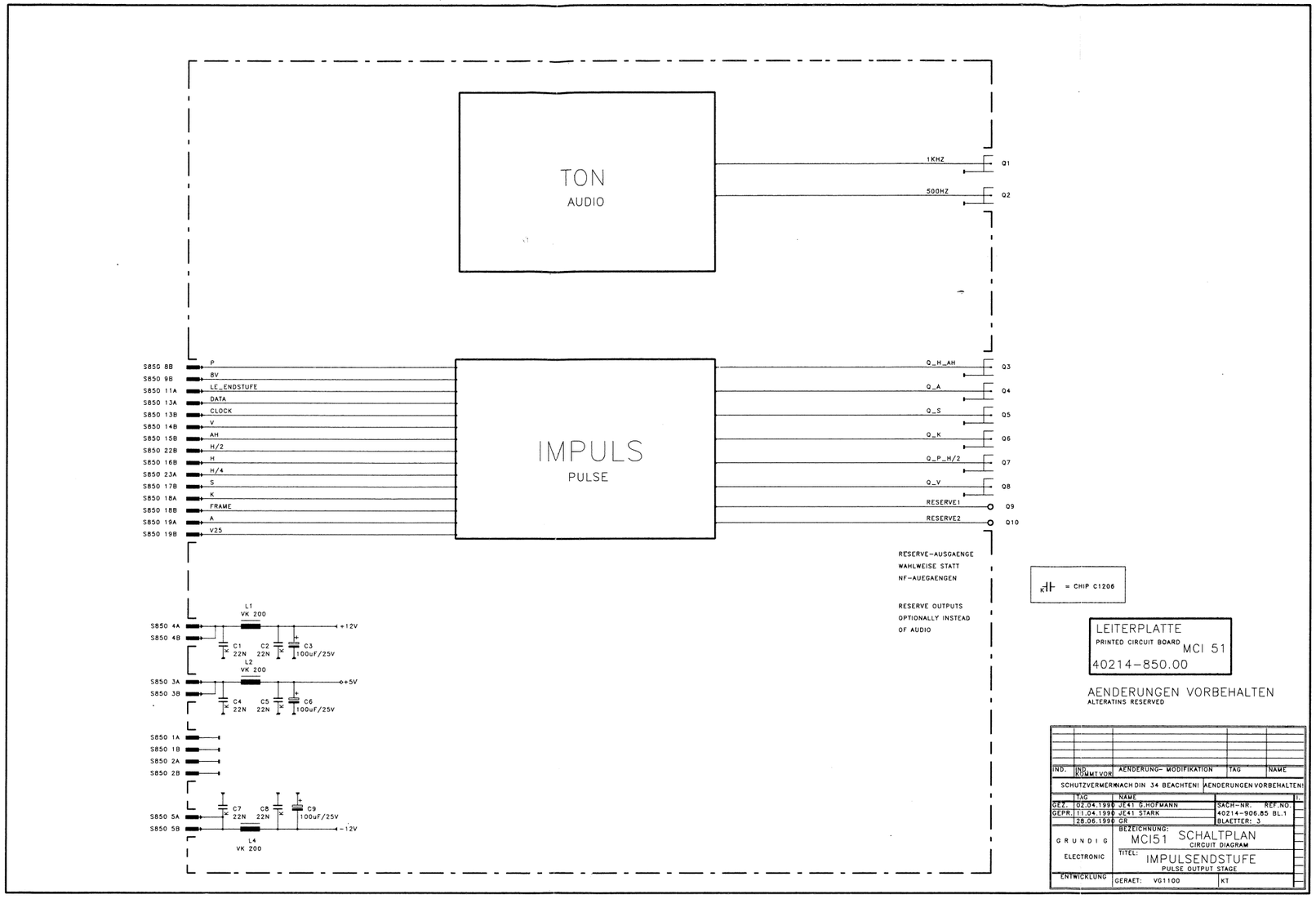
MP 207
Farbbalken/Color bar 100/0/75/0



Bestückungsseite / Component side



Lötseite / Soldering side



LEITERPLATTE
PRINTED CIRCUIT BOARD MCI 51
40214-850.00

AENDERUNGEN VORBEHALTEN
ALTERATINS RESERVED

IND.	IND. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERM NACH DIN 34 BEACHTEN!		AENDERUNGEN VORBEHALTEN!		

	TAG	NAME	
GEZ.	02.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO.
GEPR.	11.04.1990	JE41 STARK	40214-906.85 BL.1
	28.06.1990	GR	BLAETTER: 3

GRUNDIG ELECTRONIC

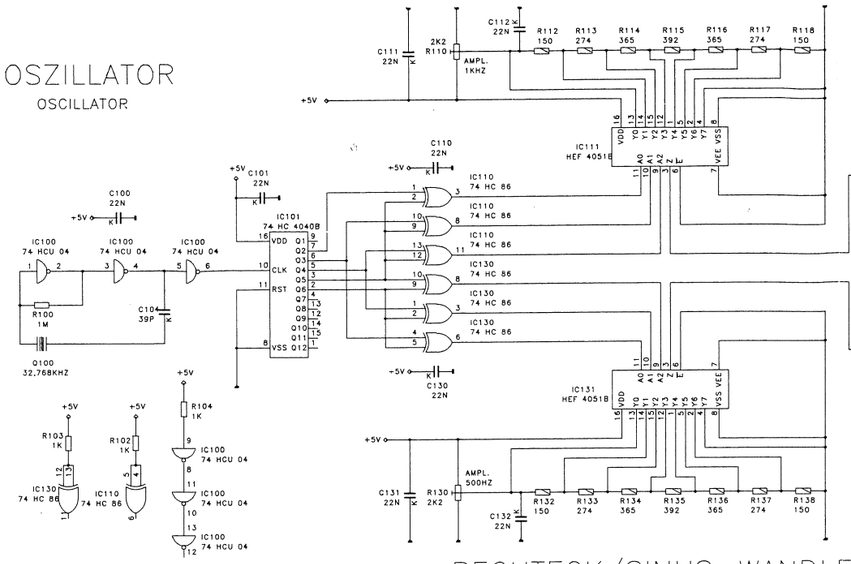
BEZEICHNUNG: MCI51 SCHALTPLAN
CIRCUIT DIAGRAM

TITEL: IMPULSENDSTUFE
PULSE OUTPUT STAGE

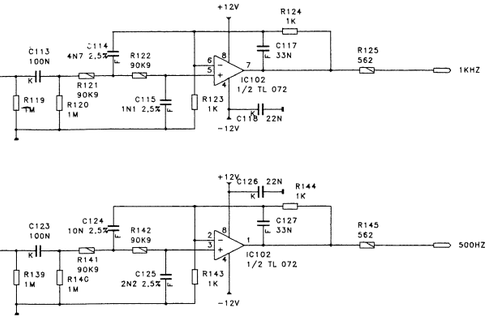
ENTWICKLUNG | GERAET: VG1100 | KT

RECHTECK/SINUS-WANDLER
SQUARE/SINE CONVERTER

OSZILLATOR
OSCILLATOR



TIEFPASS-FILTER
LOWPASS-FILTER



TIEFPASS-FILTER
LOWPASS-FILTER

RECHTECK/SINUS-WANDLER
SQUARE/SINE CONVERTER

= CHIP W0805
= MELF 1%
= FOLIE BEDRAHTET
= CHIP C1206

LEITERPLATTE
PRINTED CIRCUIT BOARD
MCI 51
40214-850.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	JNR. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN!			AENDERUNGEN VORBEHALTEN!	

	TAG	NAME	
GEZ.	02.04.1990	JE41 G.HOFMANN	SACH-NR. REF.NO.
GEPR.	11.04.1990	JE41 STARK	40214-906.85 BL.2
	27.06.1990	GR	BLAETTER: 3

GRUNDIG ELECTRONIC

BEZEICHNUNG: MCI51 SCHALTPLAN
CIRCUIT DIAGRAM

TITEL: TON
AUDIO

ENTWICKLUNG | GERAET: VG1100 | KT

POLARITAETSUMSCHALTER
POLARITY SWITCH

TIEFPASSFILTER UND AUSGANGSVERSTAERKER
LOWPASS FILTERAND OUTPUT AMPLIFIER

LEITERPLATTE
PRINTED CIRCUIT BOARD
MCI 51
40214-850.00

IC370 UND IC380 NICHT BESTUECKT
IC370 AND IC380 NOT MOUNTED

= CHIP W0805
= W0207 BEDRAHTET 1%
= MELF 1%
= CHIP C1206

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

IND.	INK. KOMMT VOR	AENDERUNG- MODIFIKATION	TAG	NAME
SCHUTZVERMERK NACH DIN 34 BEACHTEN!			AENDERUNGEN VORBEHALTEN!	

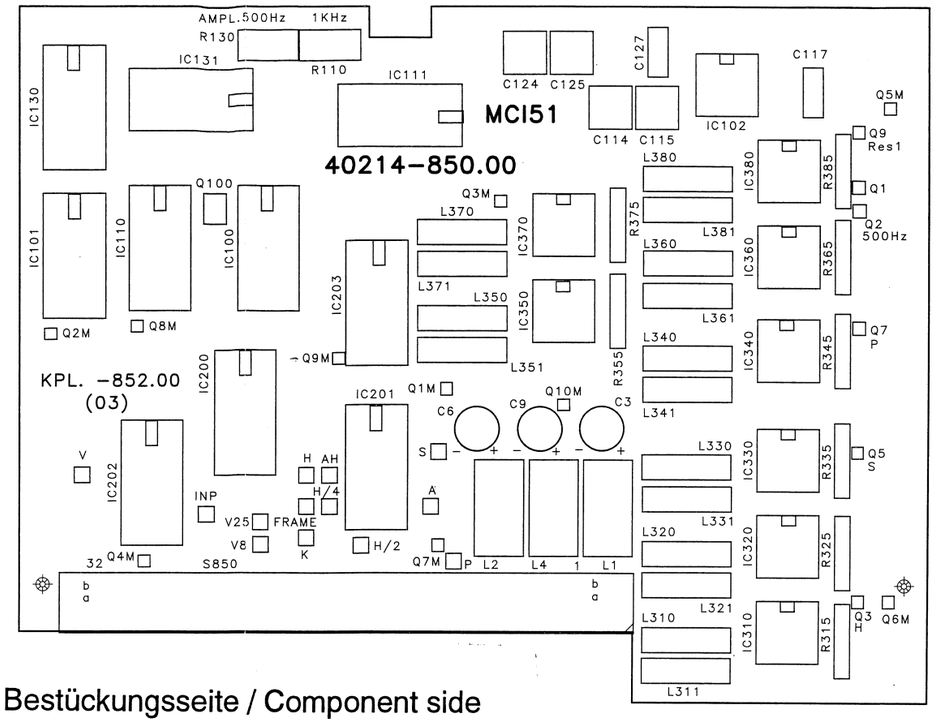
	TAG	NAME	
GEZ.	02.04.1990	JE41 G.HOFMANN	SACH-NR. REP.NO.
GEPR.	11.04.1990	JE41 STARK	40214-906.85 BL.3
	27.06.1990	GR	BLAETTER: 3

GRUNDIG ELECTRONIC ENTWICKLUNG

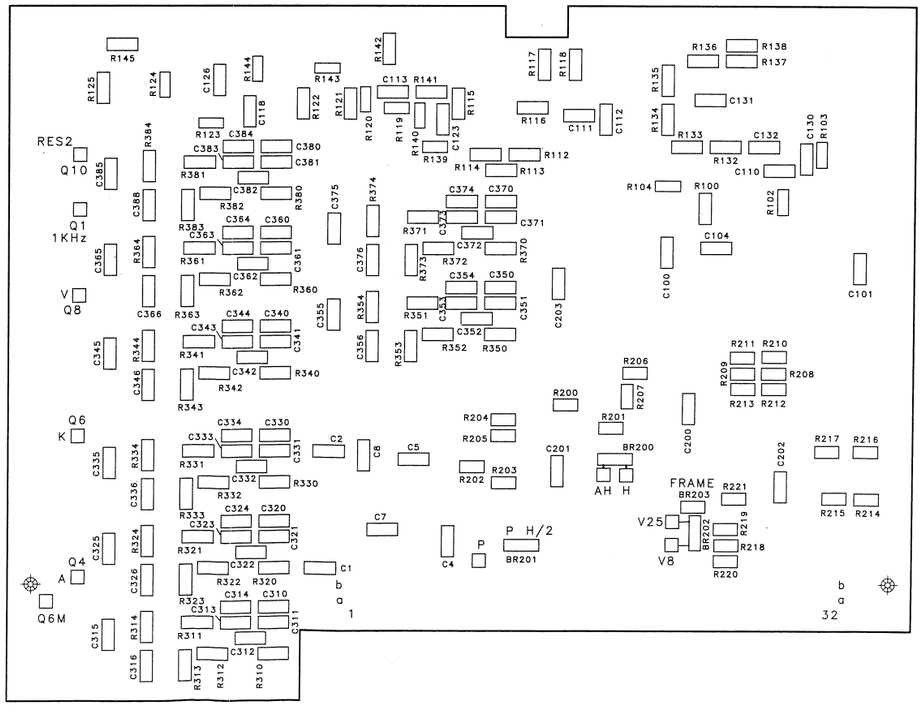
BEZEICHNUNG: MCI51 SCHALTPLAN
CIRCUIT DIAGRAM

TITEL: IMPULS
PULSE

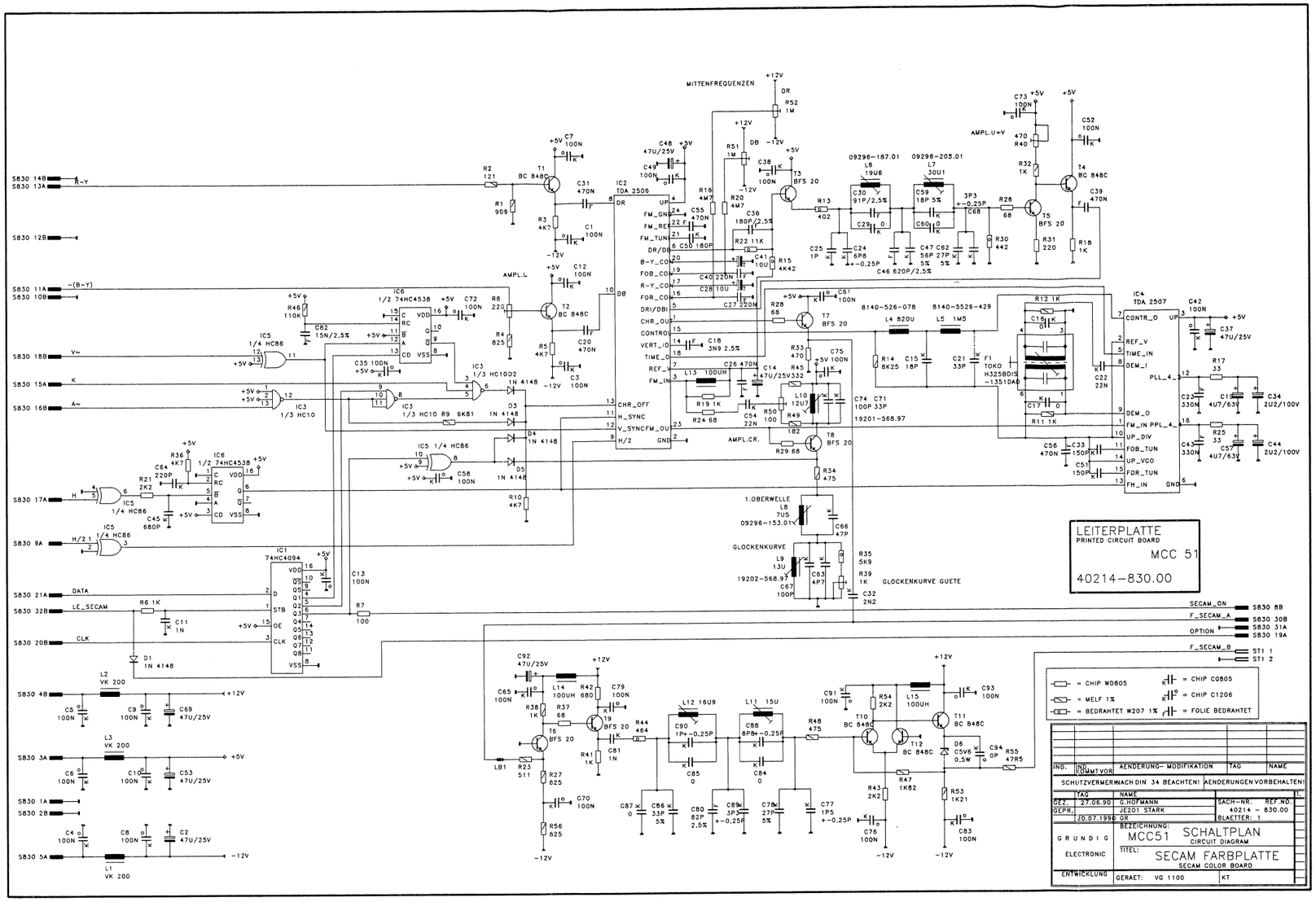
GERAET: VG1100 KT

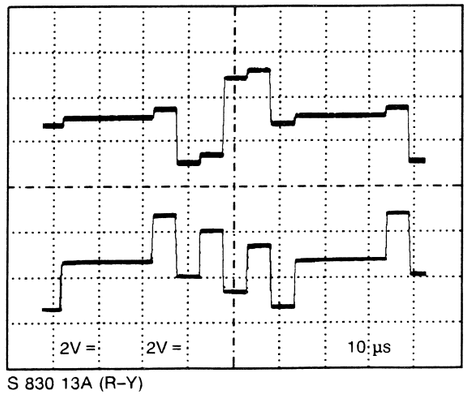


Bestückungsseite / Component side

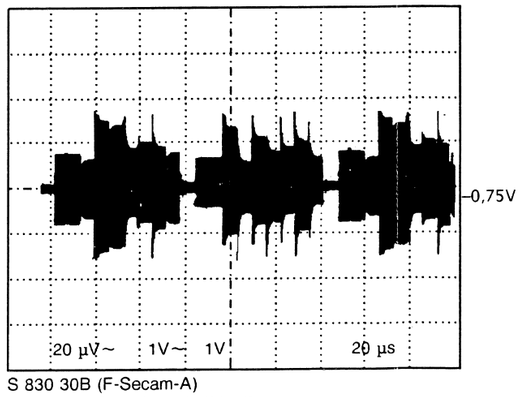


Lötseite / Soldering side

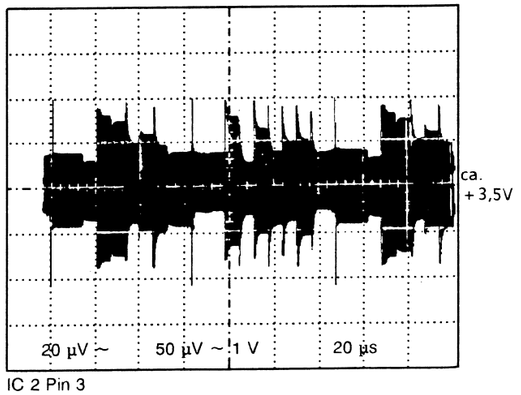




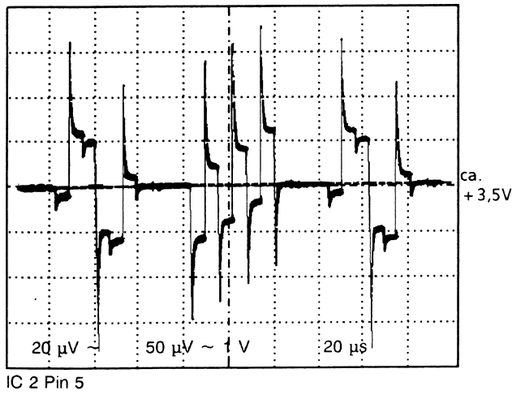
S 830 13A (R–Y)
S 830 11A –(B–Y)
Farbbalken/Color bar 100/0/75/0



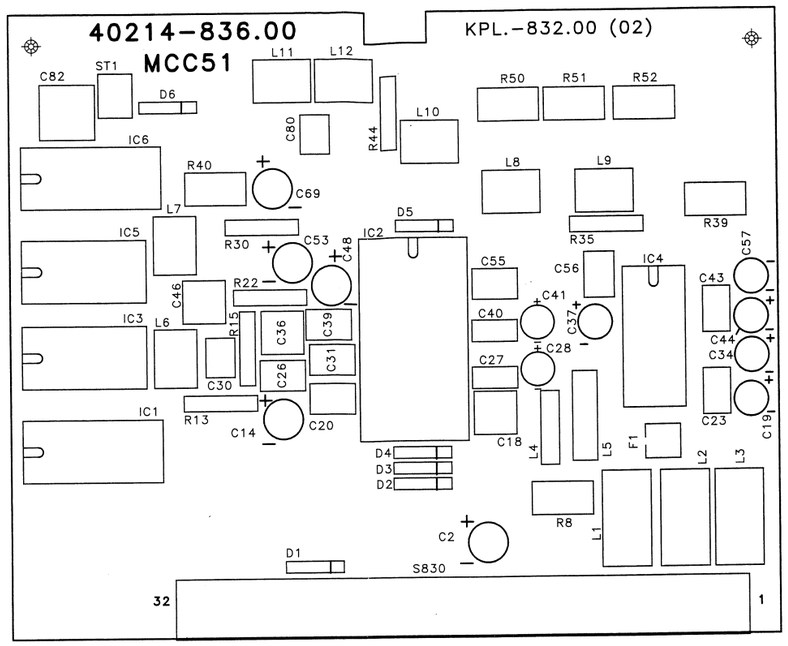
S 830 30B (F-Secam-A)
Farbbalken/Color bar 100/0/75/0



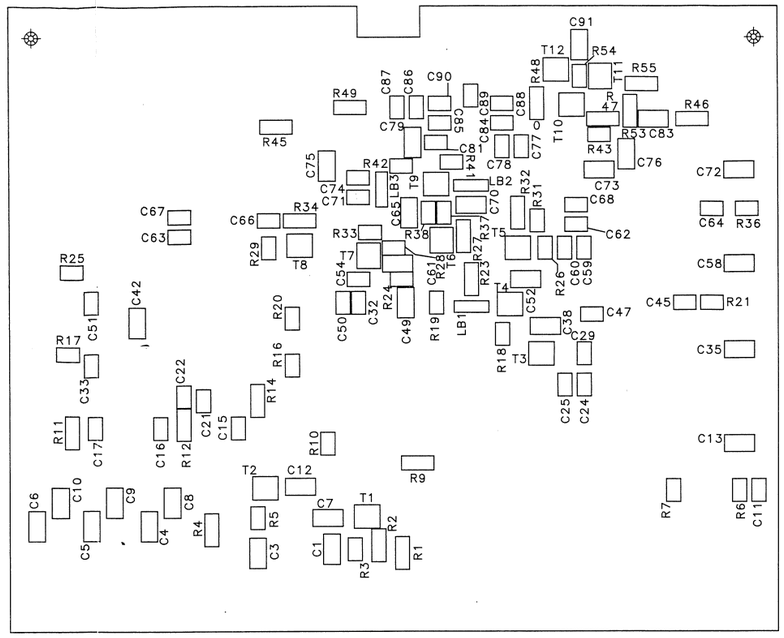
IC 2 Pin 3
Farbbalken/Color bar 100/0/75/0



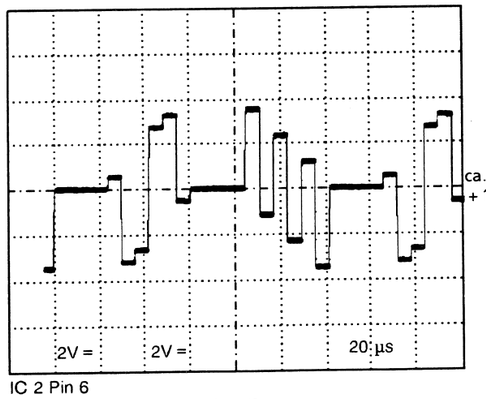
IC 2 Pin 5
Farbbalken/Color bar 100/0/75/0



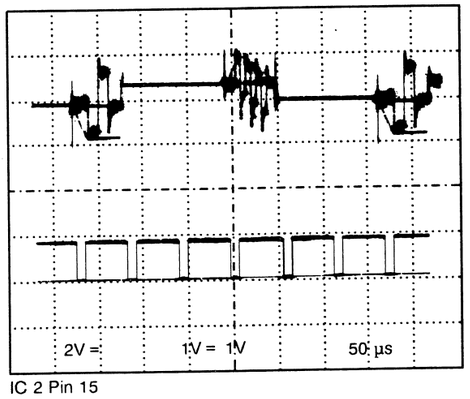
Bestückungsseite / Component side



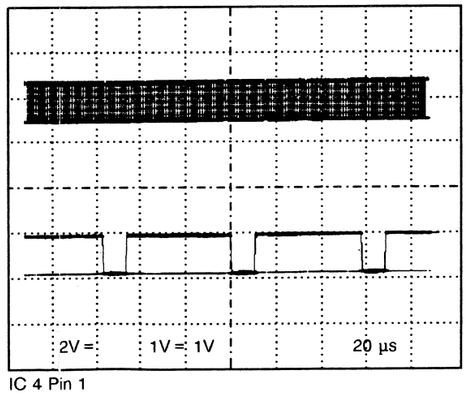
Lötseite / Soldering side



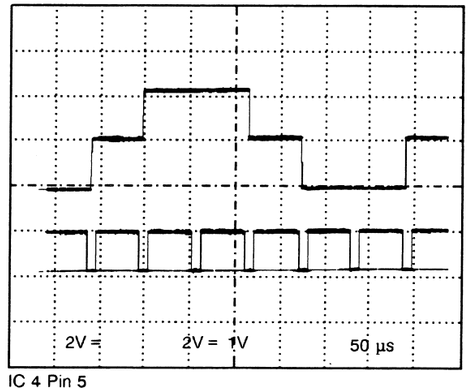
IC 2 Pin 6
Farbbalken/Color bar 100/0/75/0



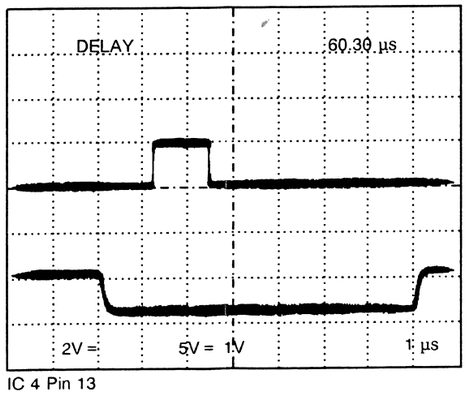
IC 2 Pin 15
S 830 16B
Farbbalken/Color bar 100/0/75/0



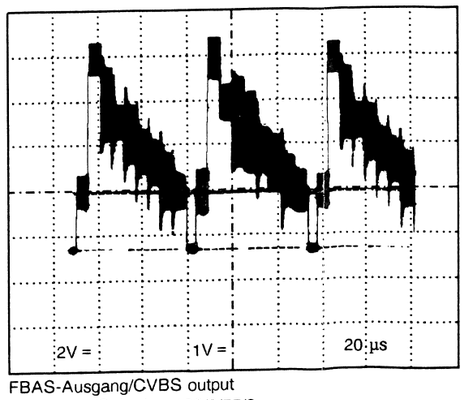
IC 4 Pin 1
S 830 16B



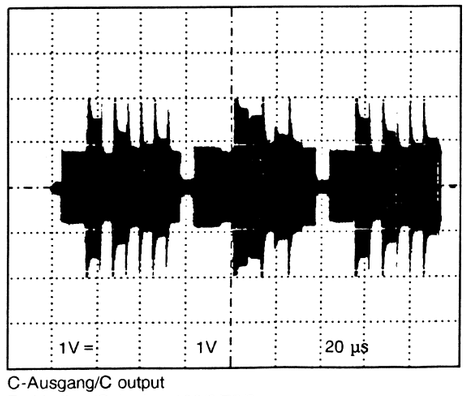
IC 4 Pin 5
S 830 16B



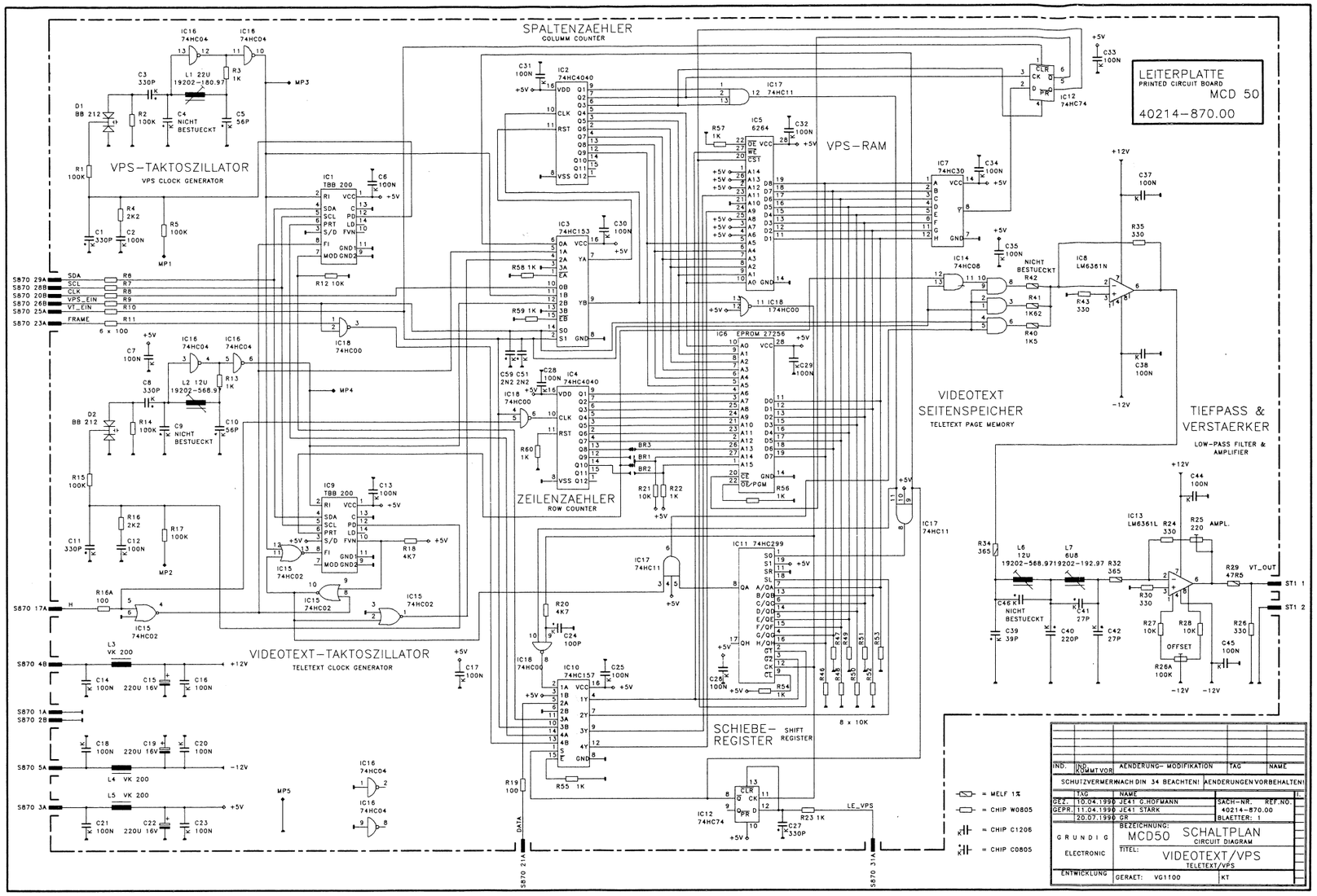
IC 4 Pin 13
IC 5 Pin 5

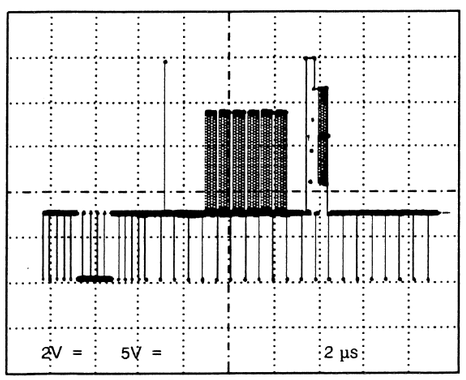


FBAS-Ausgang/CVBS output
Farbbalken/Color bar 100/0/75/0

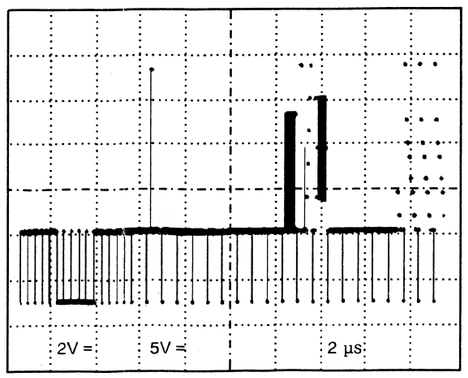


C-Ausgang/C output
Farbbalken/Color bar 100/0/75/0

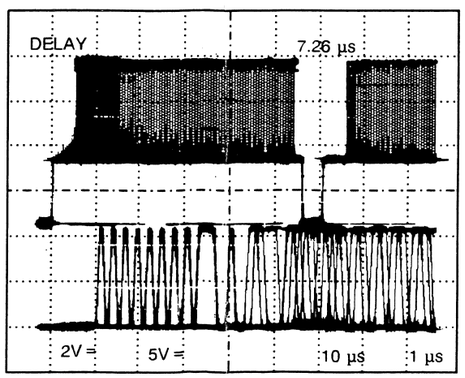




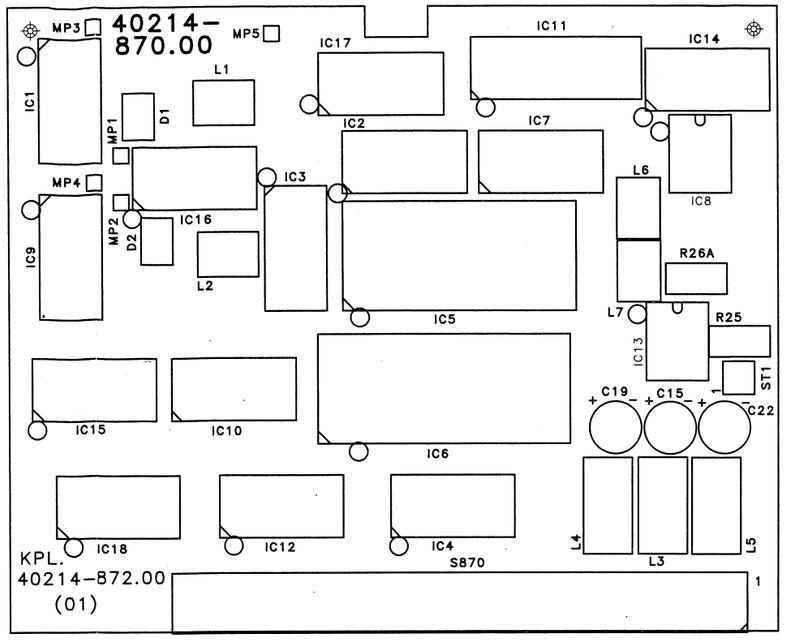
Videotext Z. 10 bis 15 (bzw. 323 bis 328)
Teletext L. 10 to 15 (or 323 to 328)



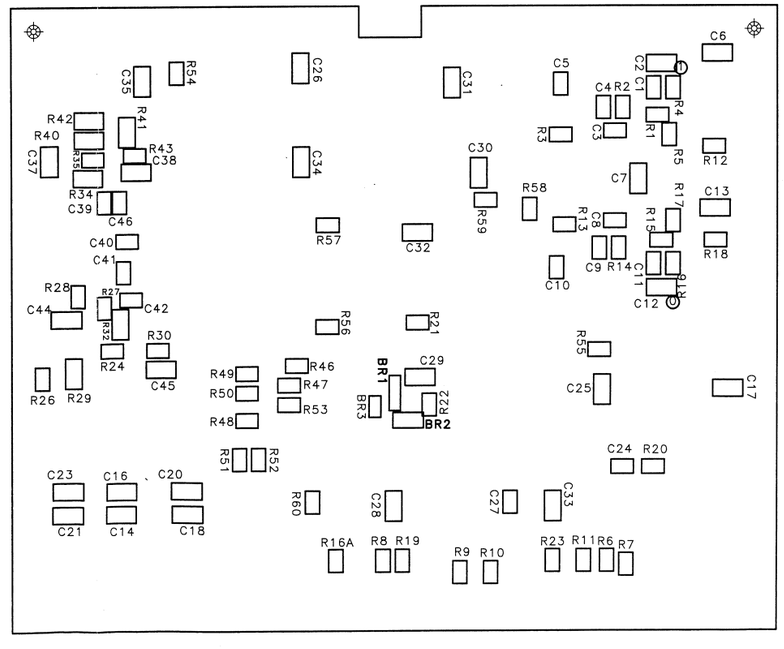
VPS Zeile 16
VPS line 16



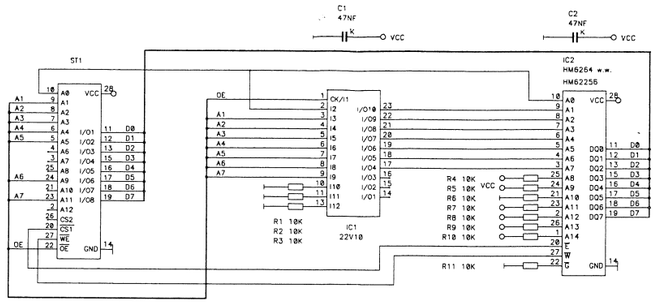
Videotext über Bild "Zeilenanfang"
Teletext over video "Start of line"



Bestückungsseite / Component side



Lötseite / Soldering side



Wird an Stelle IC 5 auf LP MCD 50 eingelötet

Is soldered onto PCB MCD 50 instead of IC 5

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED

LEITERPLATTE MCD52
PRINTED CIRCUIT BOARD
40214-810.00

Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
Schutzvermerk		nach DIN 34 beachten!	Aenderungen vorbehalten!	

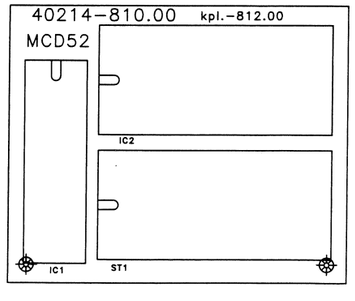
	Tag	Name	
Gez.	29.01.92	G.HOFMANN	Sach-Nr. Ref.No.
Gepr.	25.05.92	HOFMANN	40214-986.81 BL.1
	25.05.92	GR	Bogen: 1

GRUNDIG electronic

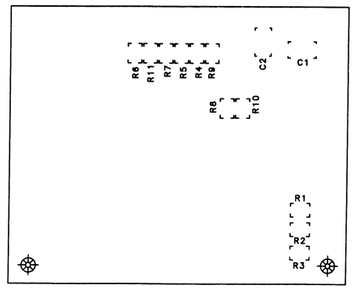
Bezeichnung: MCD52 SCHALTPLAN CIRCUIT DIAGRAM

Titel: DATENZEILEN-CODIERER

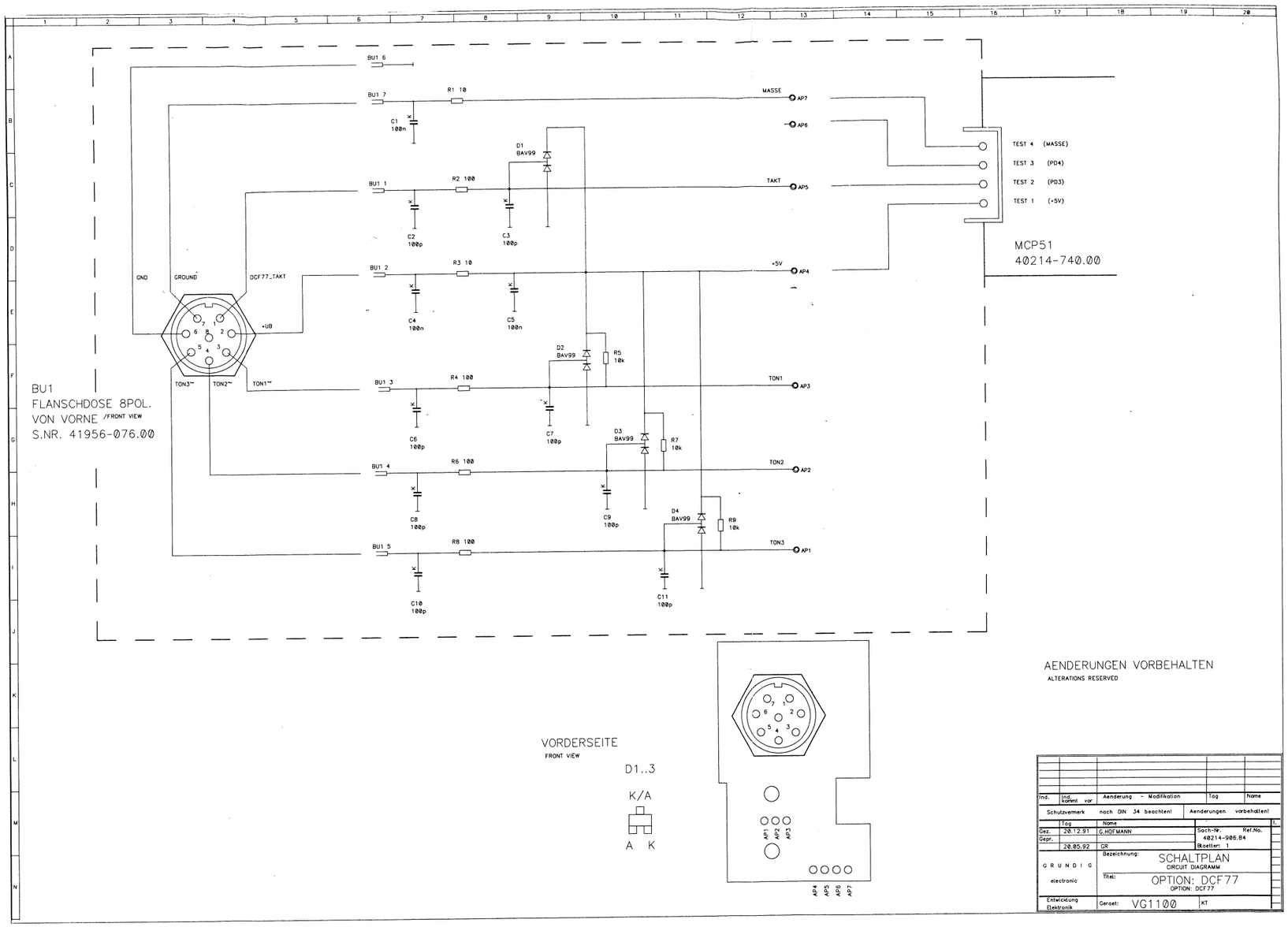
Entwicklung Elektronik | Gerael: VG1100 | KT

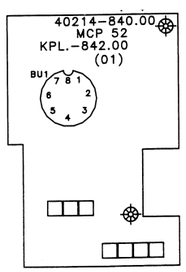


Bestückungsseite / Component side

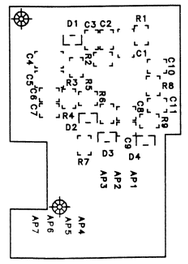


Lötseite / Soldering side

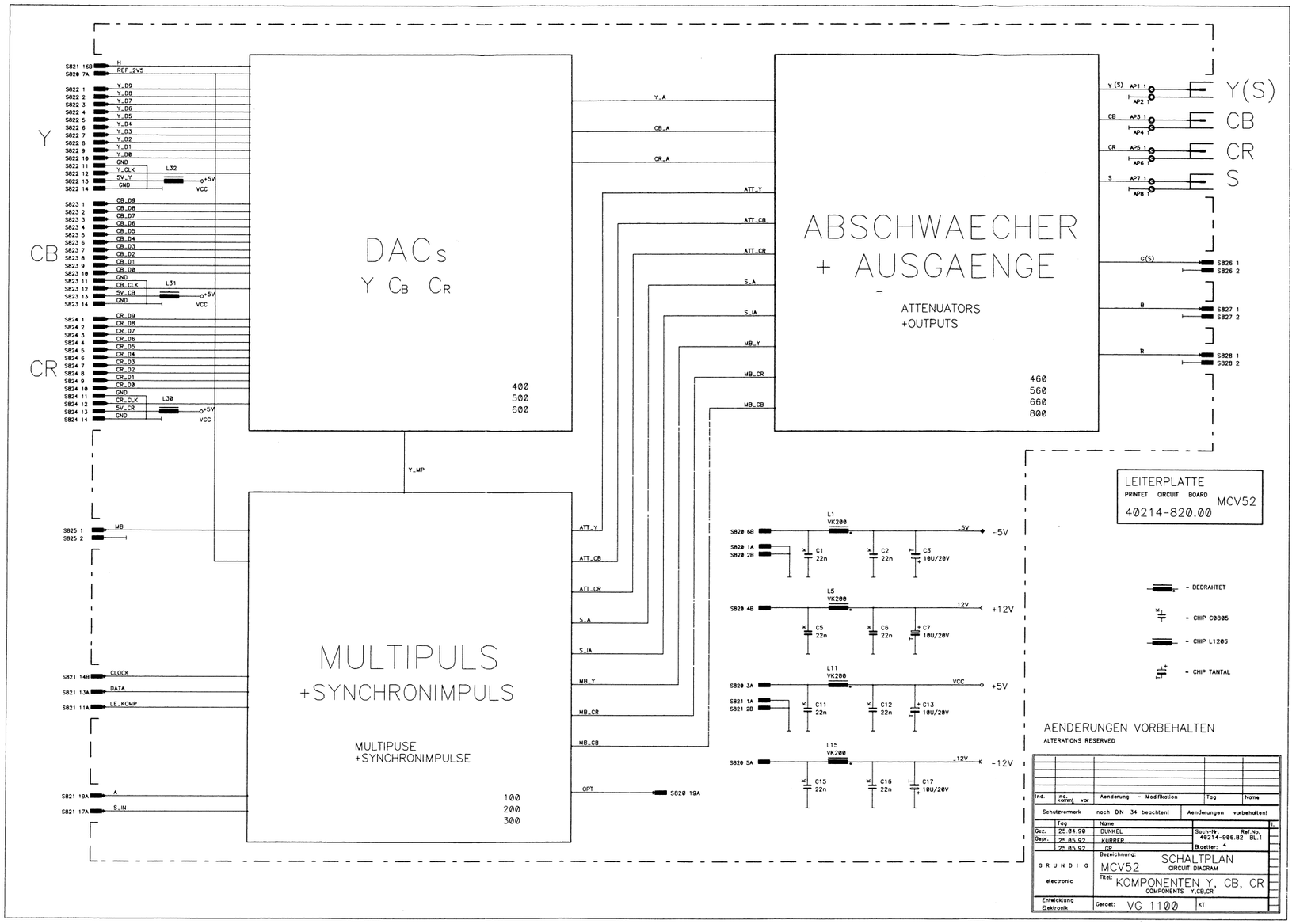


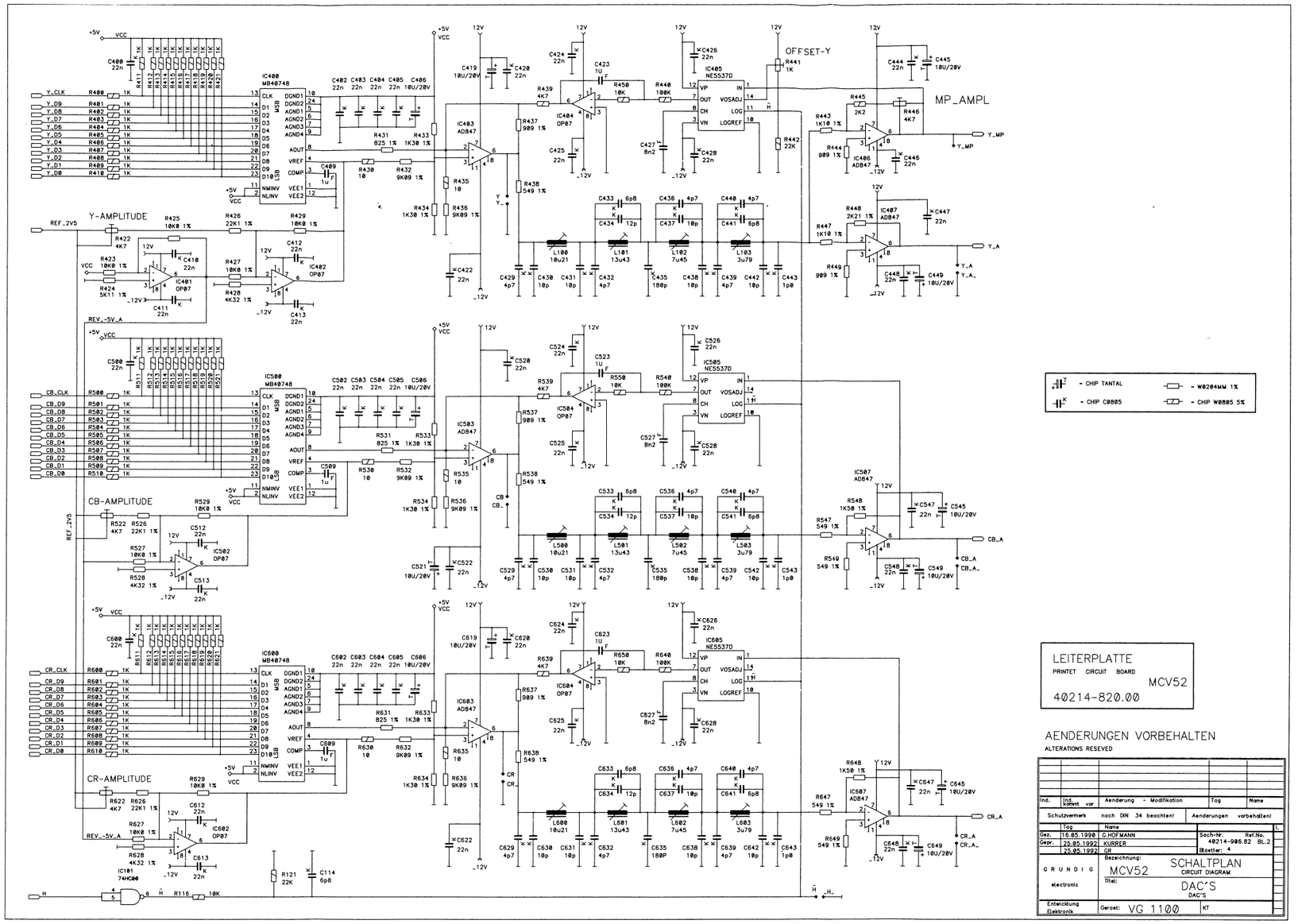


Bestückungsseite / Component side



Lötseite / Soldering side


Y
CB
CR
S821 16B H
S820 7A REF_2V5
S822 1 Y_D9
S822 2 Y_D8
S822 3 Y_D7
S822 4 Y_D6
S822 5 Y_D5
S822 6 Y_D4
S822 7 Y_D3
S822 8 Y_D2
S822 9 Y_D1
S822 10 Y_D0
S822 11 GND
S822 12 Y_CLK
S822 13 5V_Y
S822 14 GND
L32
+5V
VCC
S823 1 CB_D9
S823 2 CB_D8
S823 3 CB_D7
S823 4 CB_D6
S823 5 CB_D5
S823 6 CB_D4
S823 7 CB_D3
S823 8 CB_D2
S823 9 CB_D1
S823 10 CB_D0
S823 11 GND
S823 12 CB_CLK
S823 13 5V_CB
S823 14 GND
L31
+5V
VCC
S824 1 CR_D9
S824 2 CR_D8
S824 3 CR_D7
S824 4 CR_D6
S824 5 CR_D5
S824 6 CR_D4
S824 7 CR_D3
S824 8 CR_D2
S824 9 CR_D1
S824 10 CR_D0
S824 11 GND
S824 12 CR_CLK
S824 13 5V_CR
S824 14 GND
L30
+5V
VCC
DACs
Y CB CR
400
500
600
Y_A
CB_A
CR_A
ATT_Y
ATT_CB
ATT_CR
S_A
S_IA
MB_Y
MB_CR
MB_CB
ABSCHWAECHER
+ AUSGAENGE
ATTENUATORS
+OUTPUTS
460
560
660
800
Y(S) AP1 1
AP2 1
CB AP3 1
AP4 1
CR AP5 1
AP6 1
S AP7 1
AP8 1
Y(S)
CB
CR
S
G(S) S826 1
S826 2
B S827 1
S827 2
R S828 1
S828 2
Y_MP
S825 1 MB
S825 2
S821 14B CLOCK
S821 13A DATA
S821 11A LE_KOMP
S821 19A A
S821 17A S_IN
MULTIPUSE
+SYNCHRONIMPULSE
100
200
300
OPT
S820 19A
L1 VK200
S820 6B -5V
S820 1A
S820 2B
C1 22n
C2 22n
C3 10U/20V
-5V
L5 VK200
S820 4B 12V
C5 22n
C6 22n
C7 10U/20V
+12V
L11 VK200
S820 3A VCC
S821 1A
S821 2B
C11 22n
C12 22n
C13 10U/20V
+5V
L15 VK200
S820 5A -12V
C15 22n
C16 22n
C17 10U/20V
-12V
LEITERPLATTE
PRINTET CIRCUIT BOARD
MCV52
40214-820.00
- BEDRAHTET
- CHIP C0805
- CHIP L1206
- CHIP TANTAL
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESERVED
Ind. | Ind. kommt vor | Aenderung - Modifikation | Tag | Name
Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!
Tag | Name
Gez. 25.04.90 DUNKEL
Gepr. 25.05.92 KURRER
25.05.92 CR
Sach-Nr. 40214-986.02 Bl.1
Ref.No.
Blaetter: 4
GRUNDIG electronic
Bezeichnung: MCV52 SCHALTPLAN CIRCUIT DIAGRAM
Titel: KOMPONENTEN Y, CB, CR COMPONENTS Y,CB,CR
Entwicklung Elektronik
Gerae: VG 1100
KT



LEITERPLATTE
PRINTET CIRCUIT BOARD
MCV52
40214-820.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESEVED

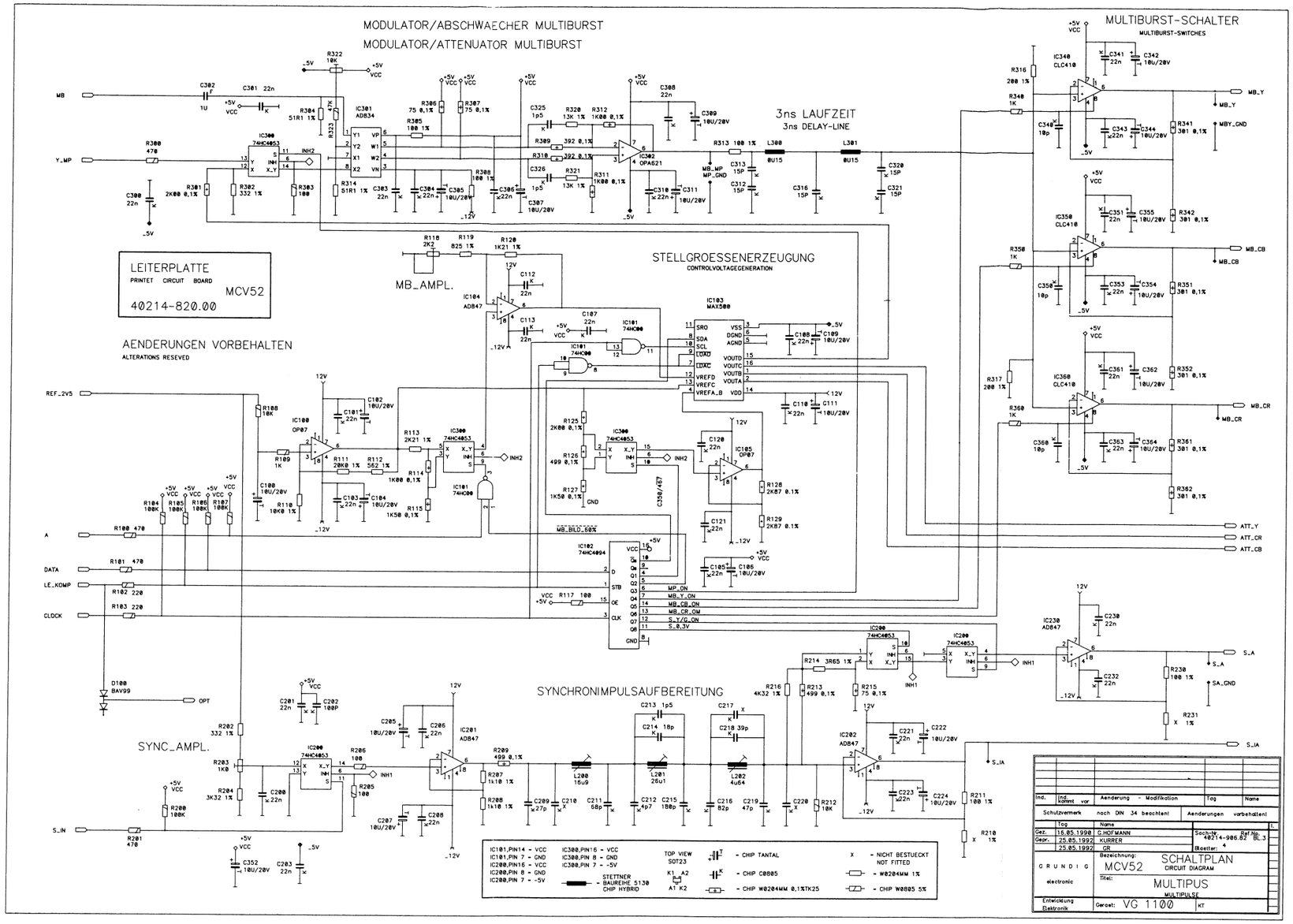
Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
Schutzvermerk		nach DIN 34 beachten!	Aenderungen	vorbehalten!

	Tag	Name	
Gez.	16.05.1990	C.HOFMANN	Sach-Nr. Ref.No. 40214-906.82 BL.2
Gepr.	25.05.1992	KURRER	Blaetter: 4
	25.05.1992	GR	

GRUNDIG electronic

Bezeichnung: SCHALTPLAN
CIRCUIT DIAGRAM
Titel: DAC'S
DAC'S

Entwicklung Elektronik | Geraet: VG 1100 | KT


MODULATOR/ABSCHWAECHER MULTIBURST
MODULATOR/ATTENUATOR MULTIBURST
MULTIBURST-SCHALTER
MULTIBURST-SWITCHES
3ns LAUFZEIT
3ns DELAY-LINE
LEITERPLATTE
PRINTET CIRCUIT BOARD
MCV52
40214-820.00
AENDERUNGEN VORBEHALTEN
ALTERATIONS RESEVED
MB_AMPL.
STELLGROESSENERZEUGUNG
CONTROLVOLTAGEGENERATION
SYNCHRONIMPULSAUFBEREITUNG
SYNC_AMPL.
IC101,PIN14 - VCC
IC101,PIN 7 - GND
IC200,PIN16 - VCC
IC200,PIN 8 - GND
IC200,PIN 7 - -5V
IC300,PIN16 - VCC
IC300,PIN 8 - GND
IC300,PIN 7 - -5V
STETTNER - BAUREIHE 5130 CHIP HYBRID
TOP VIEW SOT23
K1 A2
A1 K2
- CHIP TANTAL
- CHIP C0805
- CHIP W0204MM 0,1%TK25
X - NICHT BESTUECKT NOT FITTED
- W0204MM 1%
- CHIP W0805 5%
Ind. Ind. kommt vor Aenderung - Modifikation Tag Name
Schutzvermerk nach DIN 34 beachten! Aenderungen vorbehalten!
Tag Name
Gez. 16.05.1990 G.HOFMANN
Gepr. 25.05.1992 KURRER
25.05.1992 GR
Sach-Nr. 40214-906.82 Ref.No. BL.3
Blaetter: 4
GRUNDIG electronic
Bezeichnung: MCV52
SCHALTPLAN
CIRCUIT DIAGRAM
Titel: MULTIPUS
MULTIPULSE
Entwicklung Elektronik
Geraet: VG 1100
KT

ABSCHWAECHER Y
ATTENUATOR Y

ABSCHWAECHER CB
ATTENUATOR CB

ABSCHWAECHER CR
ATTENUATOR CR

AUSGANGSVERSTAERKER
OUTPUT AMPLIFIER

TOP VIEW SOT23 (K1 A2 / A1 K2)
- CHIP TANTAL
- CHIP C0805
- CHIP W0204MM 0,1%TK25
- W0204MM 1%
- CHIP W0805 5%

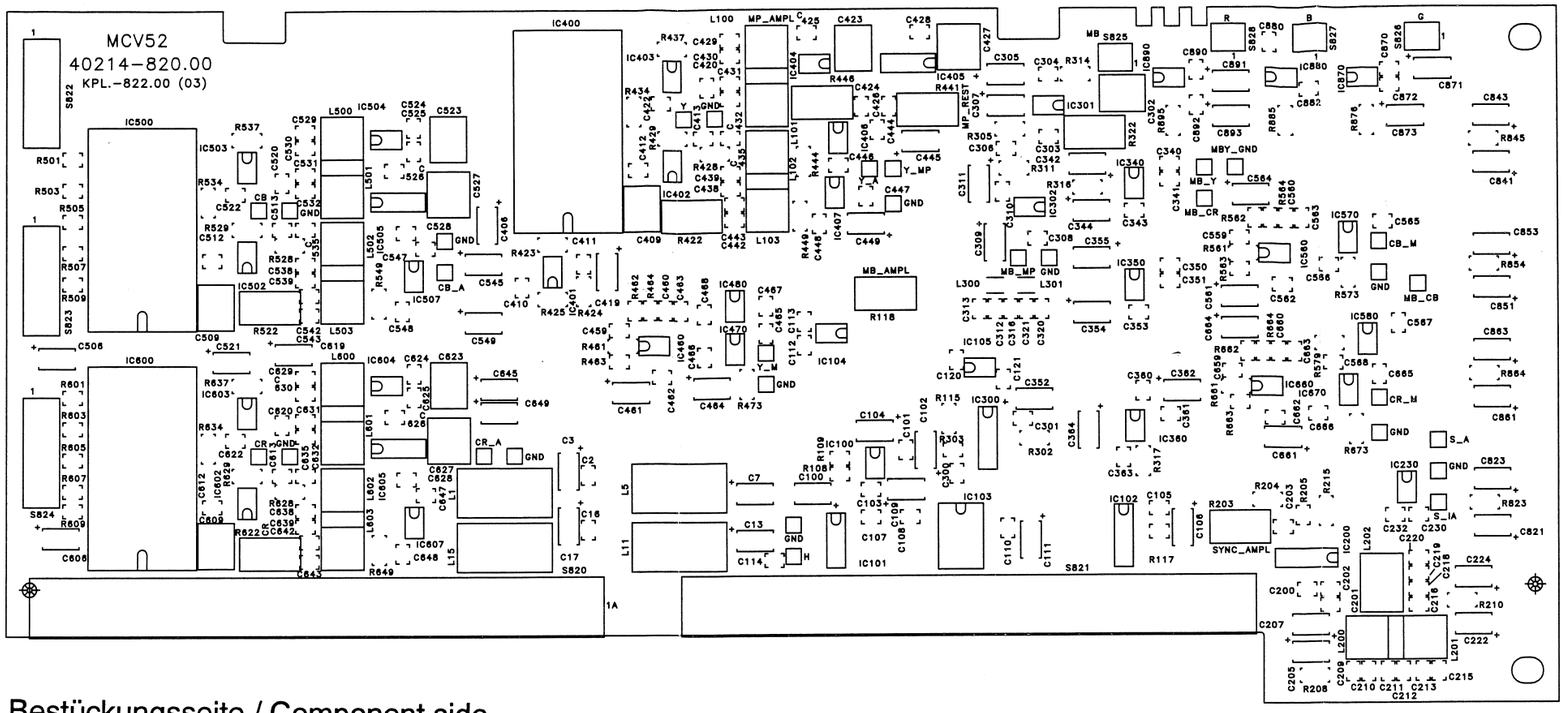
LEITERPLATTE
PRINTED CIRCUIT BOARD
MCV52
40214-820.00

AENDERUNGEN VORBEHALTEN
ALTERATIONS RESEVED

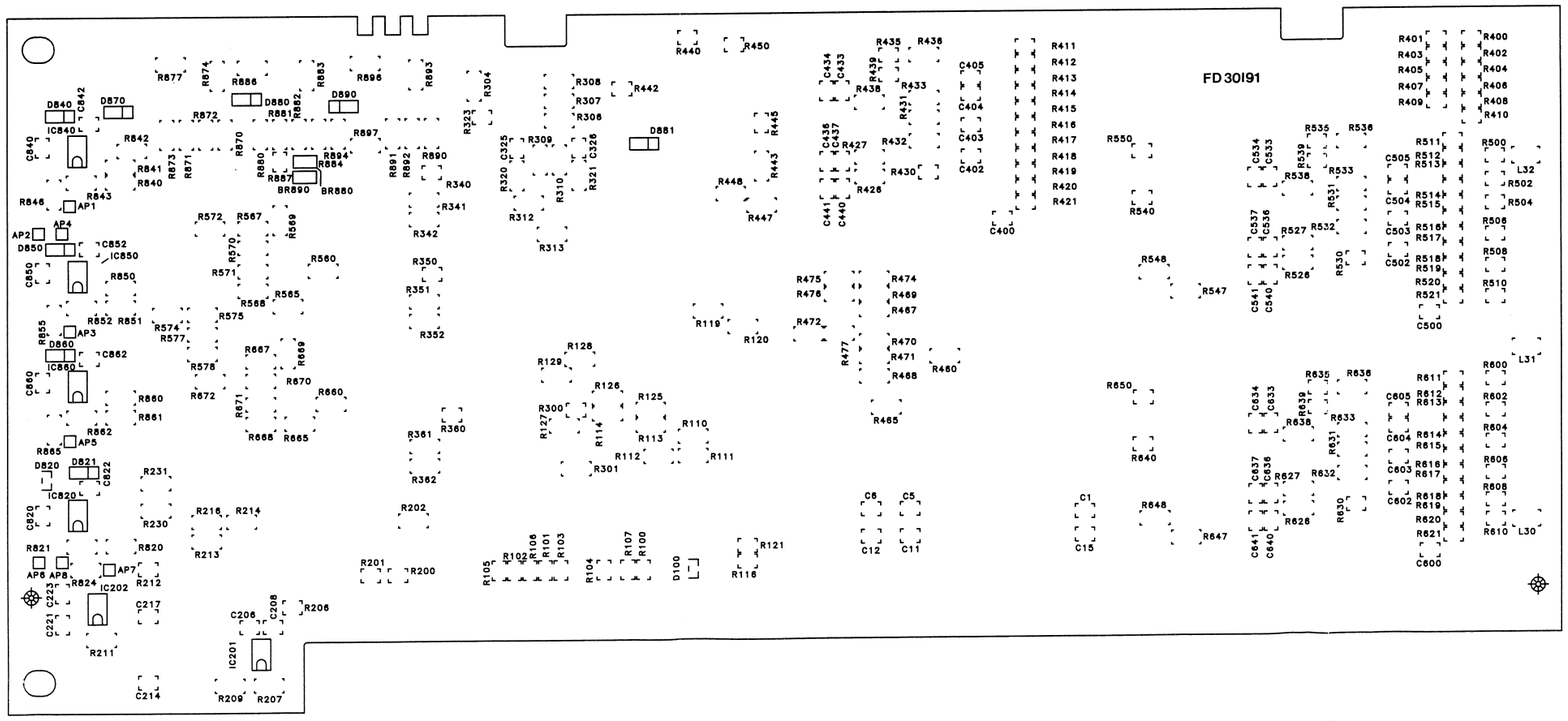
Ind.	Ind. kommt vor	Aenderung - Modifikation	Tag	Name
Schutzvermerk nach DIN 34 beachten!		Aenderungen vorbehalten!		

	Tag	Name	
Gez.	16.05.1990	G.HOFMANN	Sach-Nr. Ref.No. 40214-986.82 BL.4
Gepr.	25.05.1992	KURRER	Bloetter: 4
	25.05.1992	GB	

GRUNDIG electronic
Bezeichnung: MCV52 SCHALTPLAN CIRCUIT DIAGRAM
Titel: ABSCHWAECHER+AUSGAENGE ATTENUATORS + OUTPUTS
Entwicklung Elektronik
Geraet: VG 1100 KT



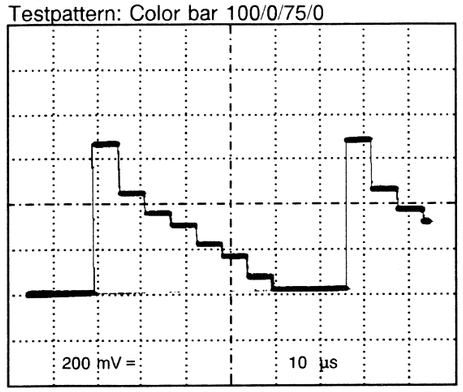
Bestückungsseite / Component side



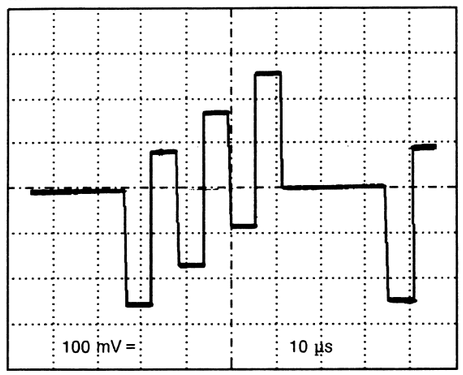
Lötseite / Soldering side

Oszillogramme: MCV 52 Y, C_B, C_R /Oszillograms: MCV 52 Y, C_B, C_R
Komponentenausgang/Component output

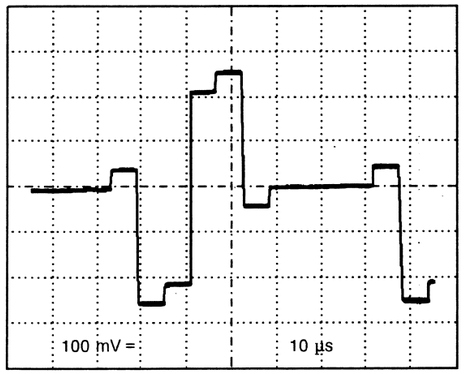
Testbild: Farbbalken 100/0/75/0
Testpattern: Color bar 100/0/75/0



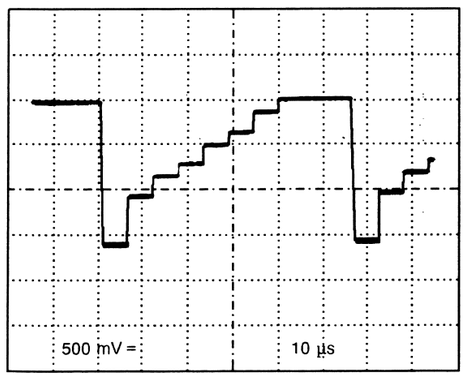
MP Y



MP CB

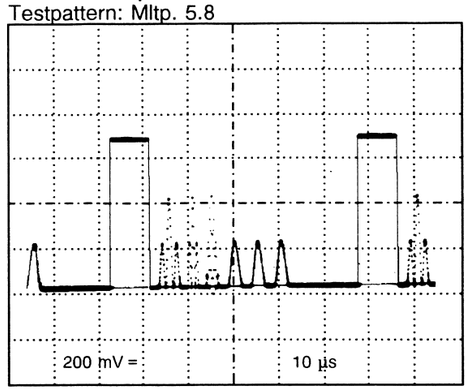


MP CR

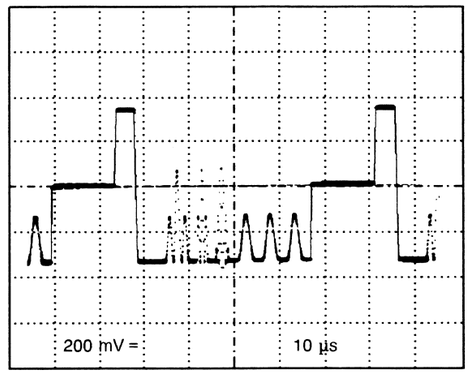


MP Y–MP

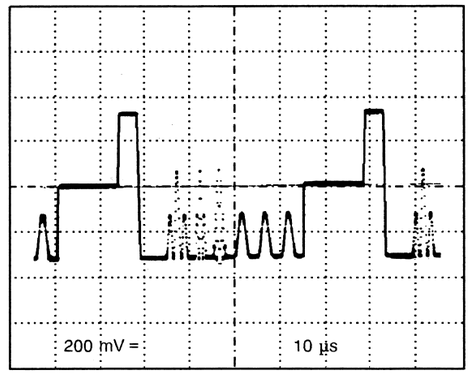
Testbild: Mltp. 5.8
Testpattern: Mltp. 5.8



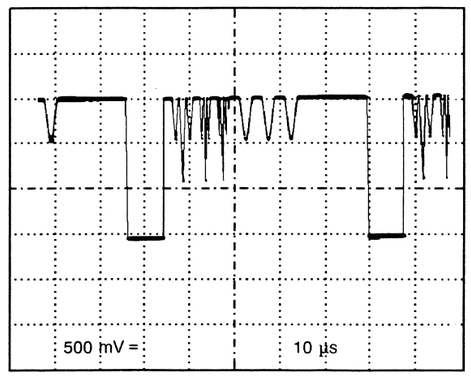
MP Y



MP CB



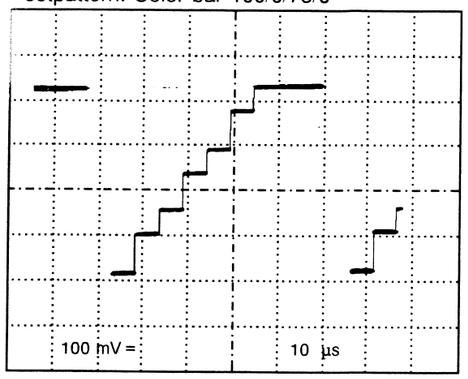
MP CR



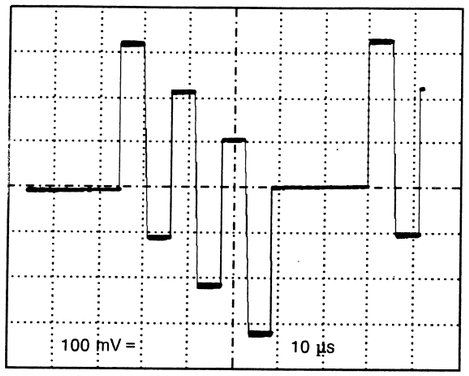
MP Y–MP

Oszillogramme: MCV 52 Y, CB, CR /Oszillograms: MCV 52 Y, CB, CR
Komponentenausgang/Component output

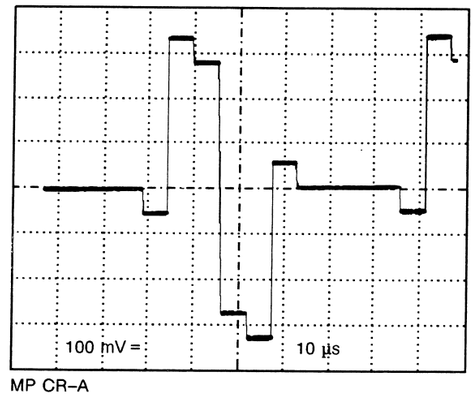
Testbild: Farbbalken 100/0/75/0
Testpattern: Color bar 100/0/75/0



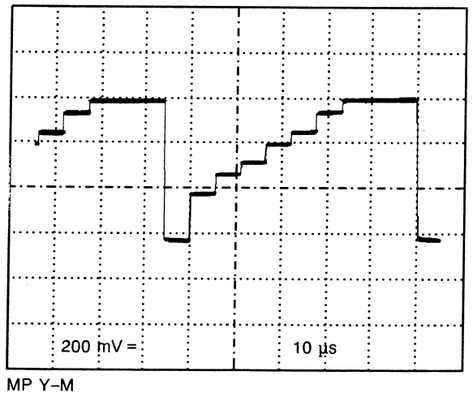
MP Y–A



MP CB–A

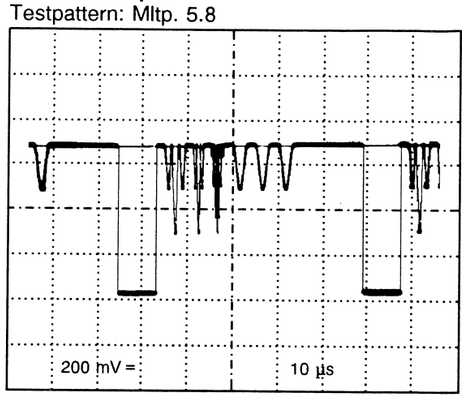


MP CR–A

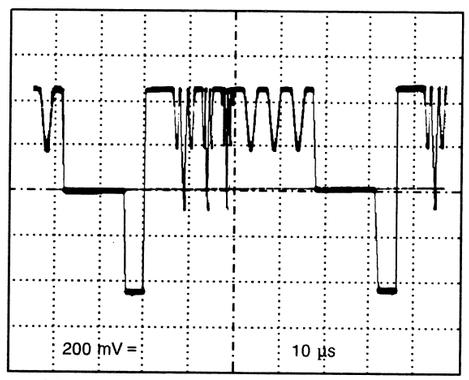


MP Y–M

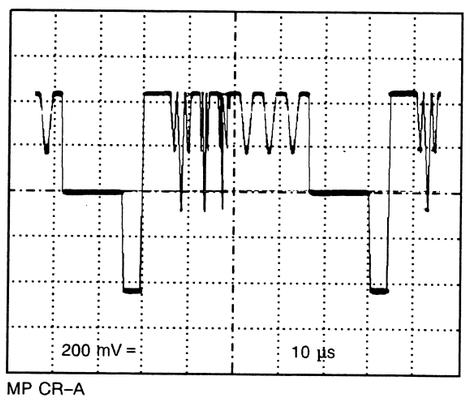
Testbild: Mltp. 5.8
Testpattern: Mltp. 5.8



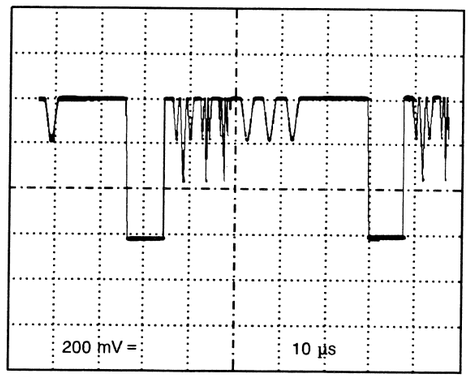
MP Y–A



MP CB–A



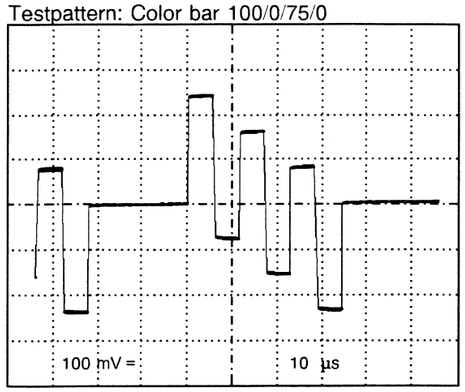
MP CR–A



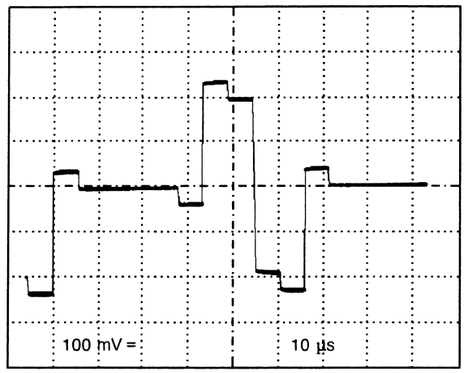
MP Y–M

Oszillogramme: MCV 52 Y, C_B, C_R /Oszillograms: MCV 52 Y, C_B, C_R
Komponentenausgang/Component output

Testbild: Farbbalken 100/0/75/0
Testpattern: Color bar 100/0/75/0

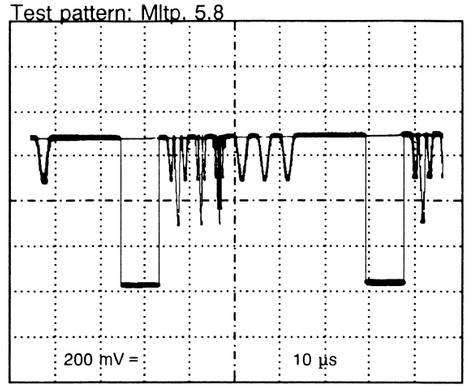


MP CB–M

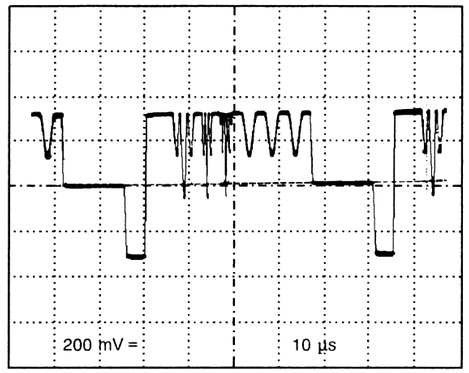


MP CR–M

Testbild: Mltp. 5.8
Test pattern: Mltp. 5.8

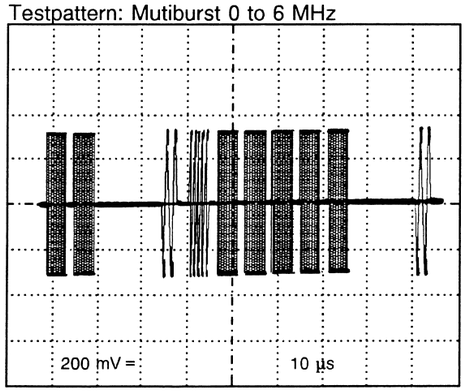


MP CB–M

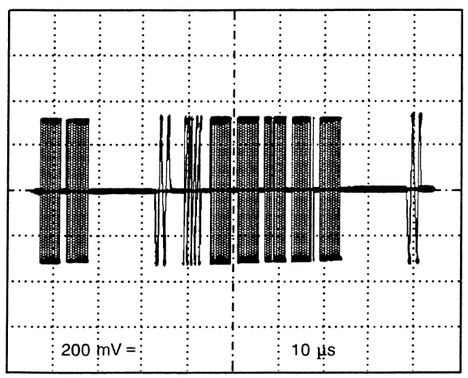


MP CR–M

Testbild: Mutiburst 0 bis 6 MHz
Testpattern: Mutiburst 0 to 6 MHz

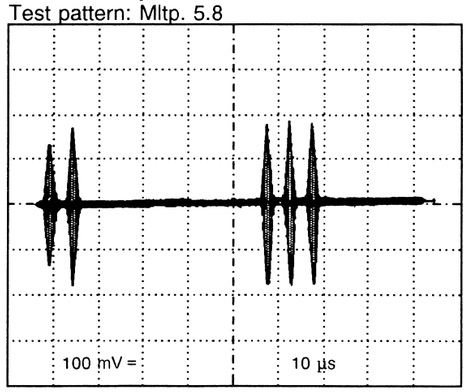


MP MB–MP

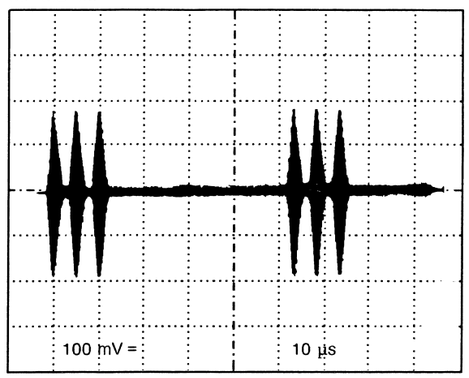


MP MB–Y

Testbild: Mltp. 5.8
Test pattern: Mltp. 5.8



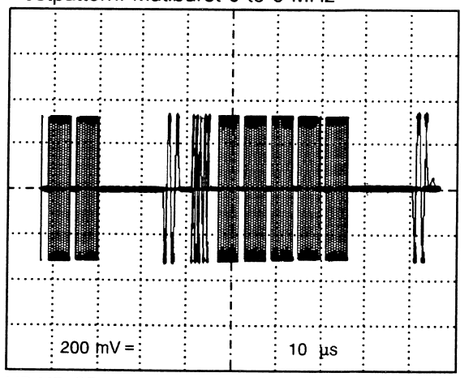
MP MB–MP



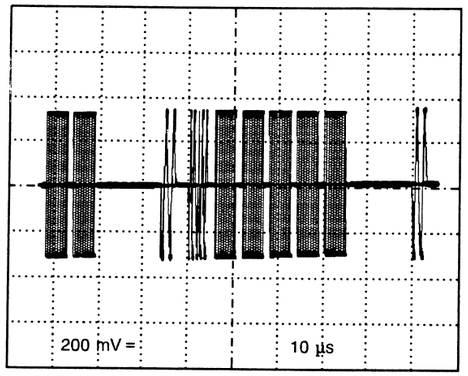
MP MB–Y

Oszillogramme: MCV 52 Y, CB, CR /Oszillograms: MCV 52 Y, CB, CR
Komponentenausgang/Component output

Testbild: Mutiburst 0 bis 6 MHz
Testpattern: Mutiburst 0 to 6 MHz

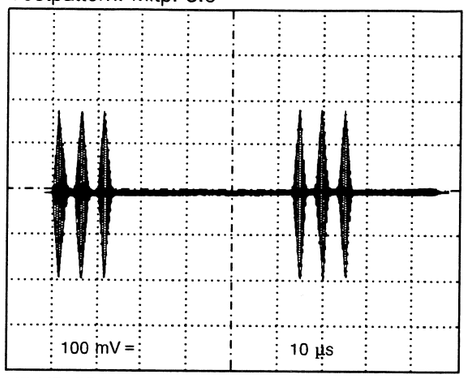


MP MB–CB

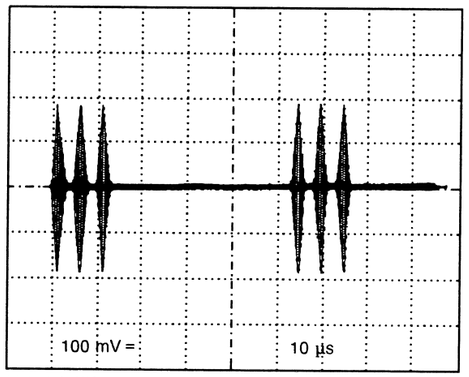


MP MB–CR

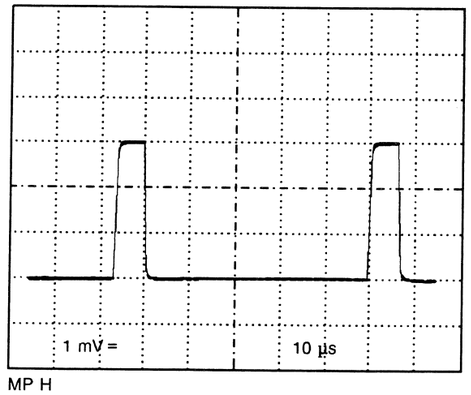
Testbild: Mltp. 5.8
Testpattern: Mltp. 5.8



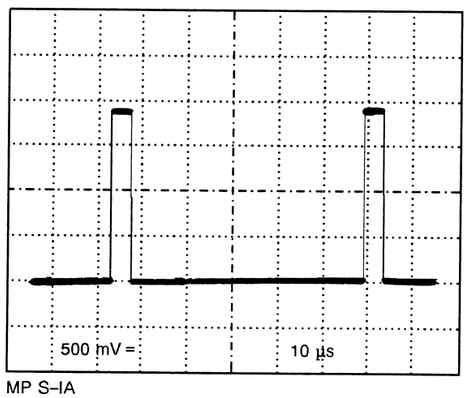
MP MB–CB



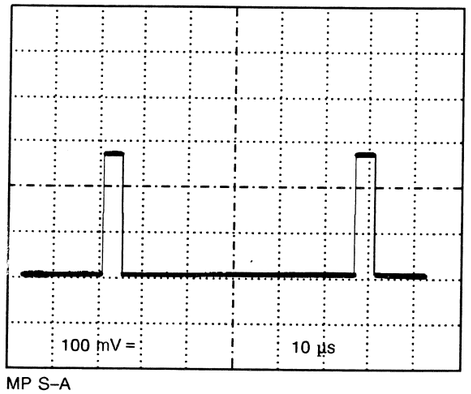
MP MB–CR



MP H

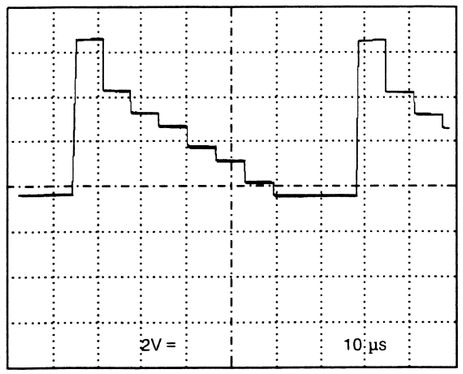


MP S–IA

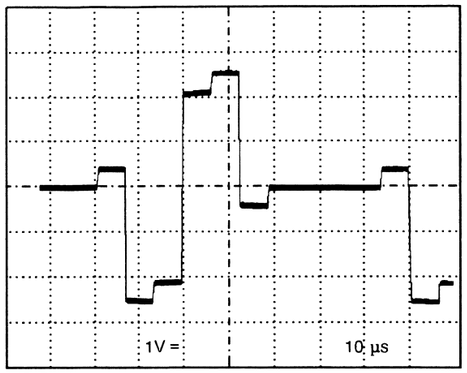


MP S–A

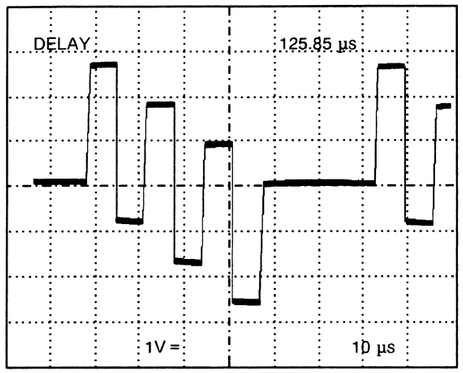
Oszillogramme: MCV 52 Video Baustein/Oszillograms: MCV 52 Video module



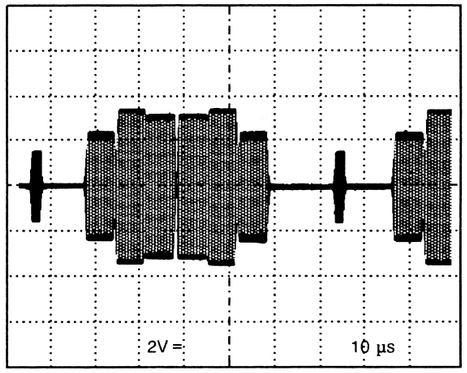
MP Y
Farbbalken/Color bar 100/0/75/0



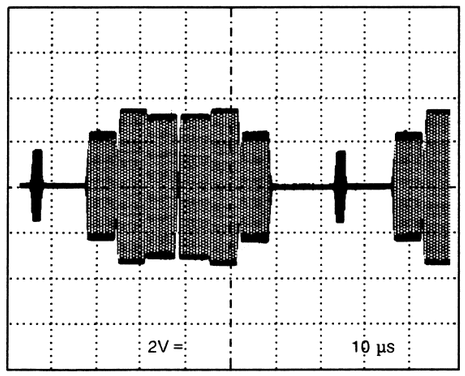
MP R–Y
Farbbalken/Color bar 100/0/75/0



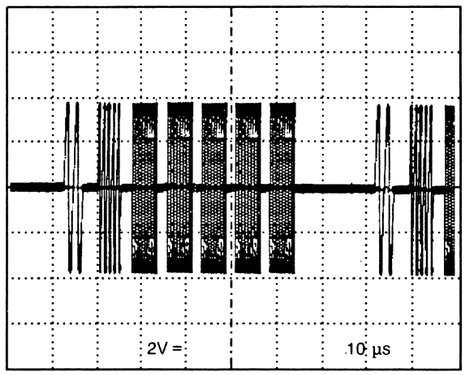
MP –(B–Y)
Farbbalken/Color bar 100/0/75/0



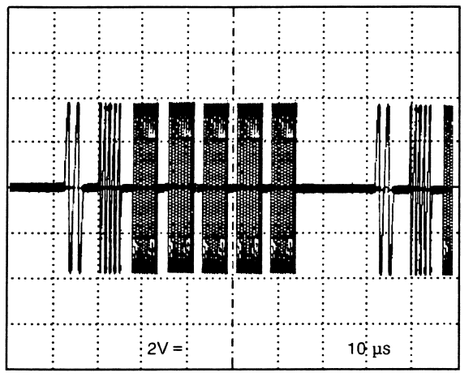
MP CH–IN
Farbbalken/Color bar 100/0/75/0



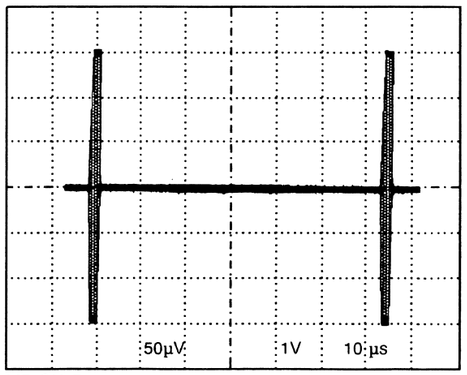
MP CH
Farbbalken/Color bar 100/0/75/0



MP MB–IN
Multiburst 0,5 bis/to 6 MHz



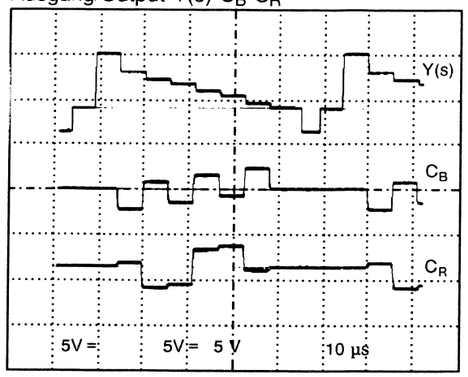
MP MB
Multiburst 0,5 bis/to 6 MHz



MP CH–Burst
Farbbalken/Color bar 100/0/75/0

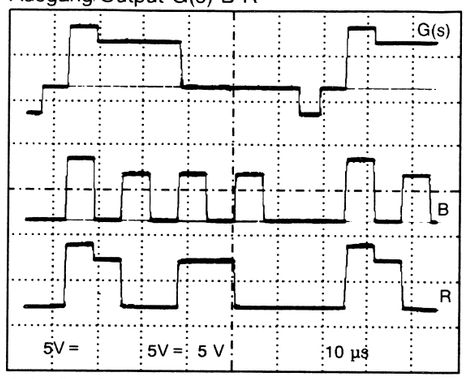
Oszillogramme der Ausgangssignale/Oszillograms of the output signals
Nur mit Option MCV 52-Komponentenbaustein/Only with the option MCV 52 component module

Ausgang/Output Y(s) C_B C_R

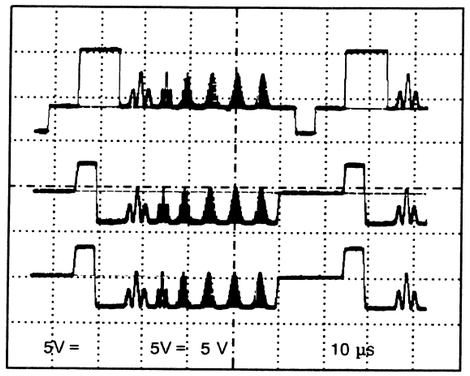


Farbbalken/Color bar 100/0/75/0

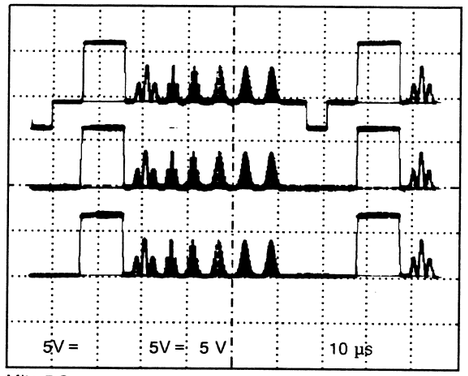
Ausgang/Output G(s) B R



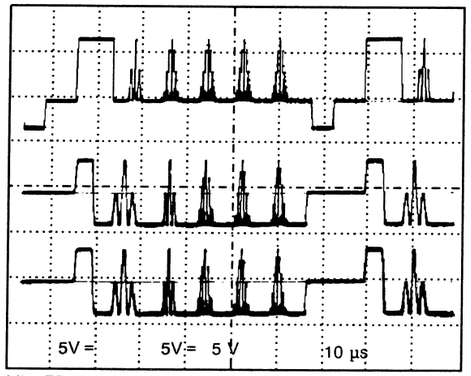
Farbbalken/Color bar 100/0/75/0



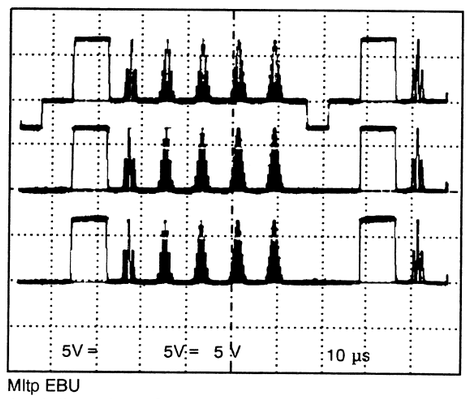
Mltp 5,8



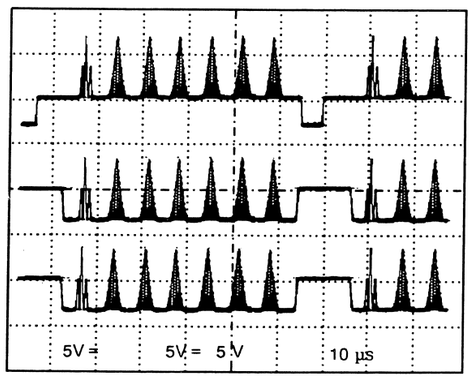
Mltp 5,8
Ampl. C_B und/and C_R auf /set to 0V eingestellt!



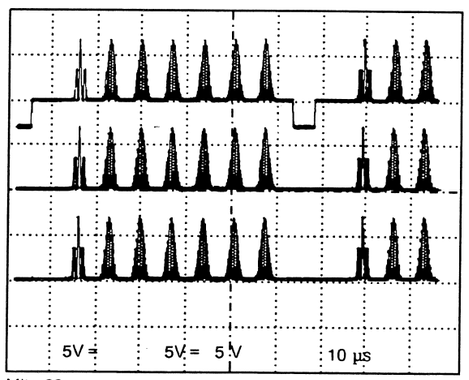
Mltp EBU
Multiburst C_B und/and C_R abgeschaltet/switched off!



Mltp EBU
Ampl. C_B und/and C_R auf/set to 0V eingestellt!



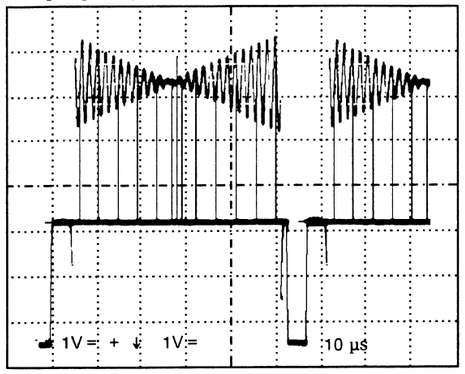
Mltp 20



Mltp 20
Ampl. C_B und/and C_R auf/set to 0V eingestellt!

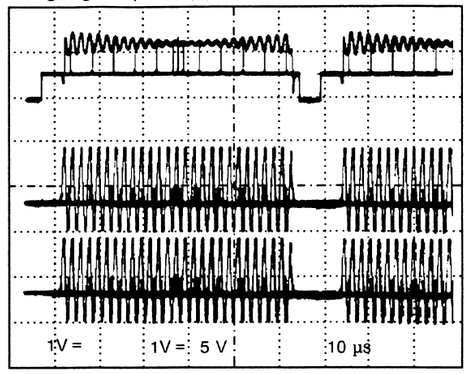
Oszillogramme der Ausgangssignale/Oszillograms of the output signals
Nur mit Option MCV 52-Komponentenbaustein/Only with the option MCV 52 component module

Ausgang/Output Y(s) C_B C_R

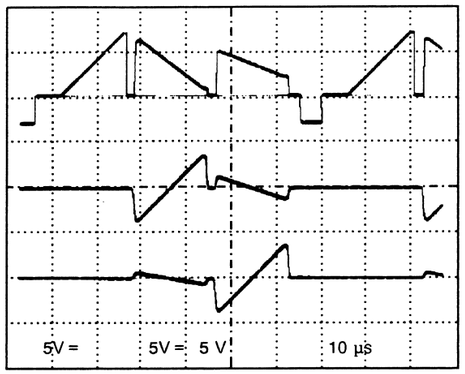


Y C_B C_R Bowtie 1
Y-Signal–C_B-Signal

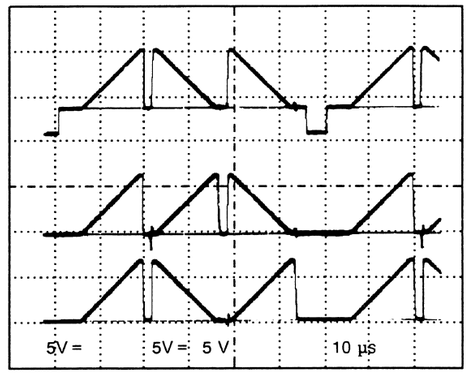
Ausgang/Output G(s) B R



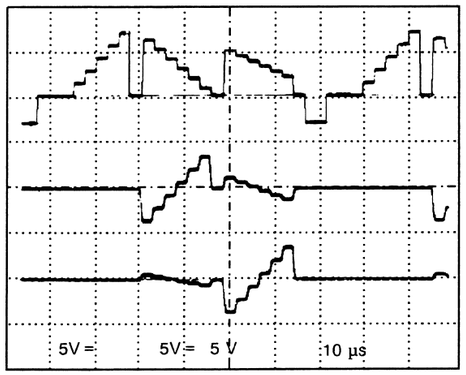
Y C_B C_R Bowtie 1



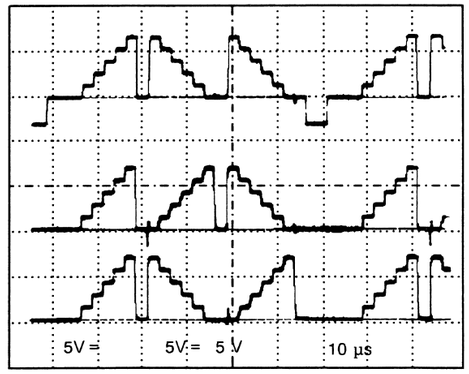
User Def 1 val–Rmp



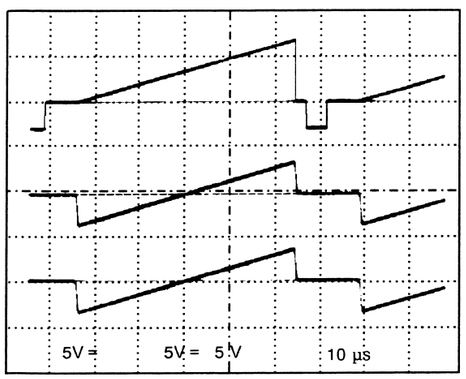
User Def 1 val–Rmp



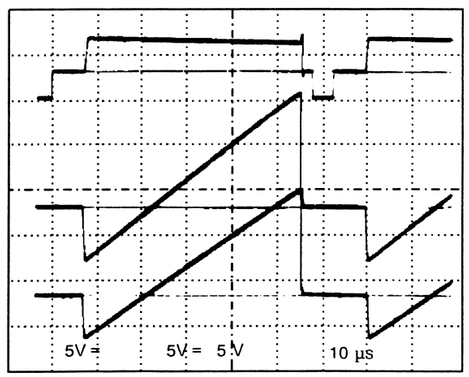
User Def 1 val–Stc



User Def 1 val–Stc



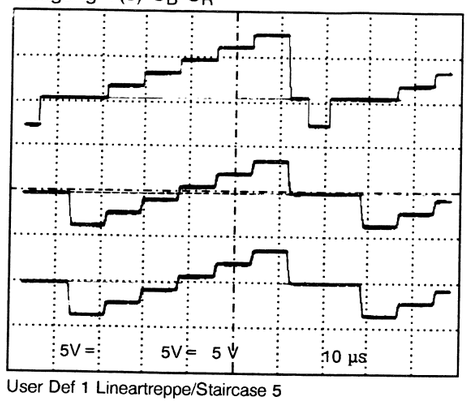
User Def 1 Sägezahn/sawtooth



User Def 1 Sägezahn/sawtooth

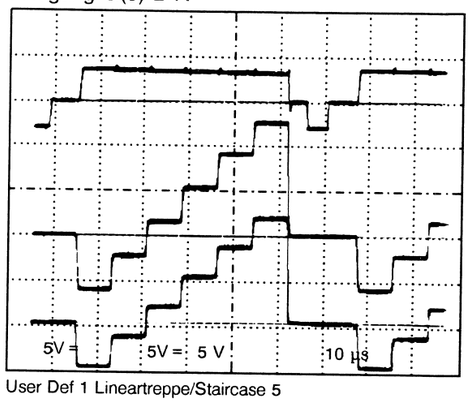
Oszillogramme der Ausgangssignale/Oszillograms of the output signals
Nur mit Option MCV 52-Komponentenbaustein/Only with the option MCV 52 component module

Ausgang Y(s) C_B C_R

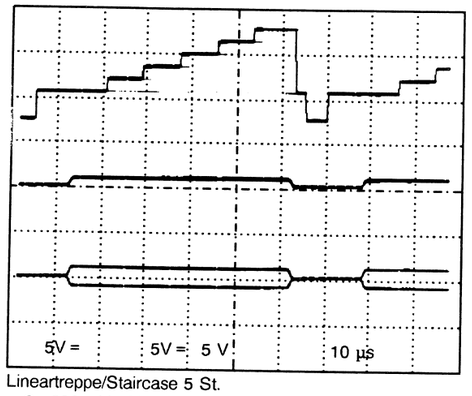


User Def 1 Lineartreppe/Staircase 5

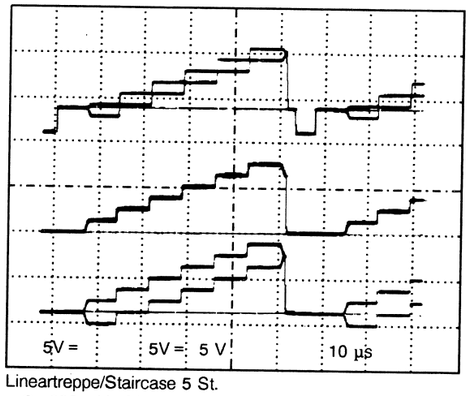
Ausgang G(s) B R



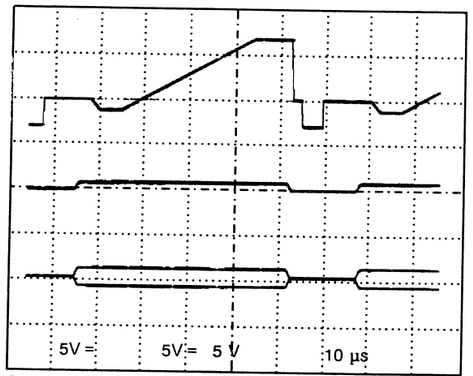
User Def 1 Lineartreppe/Staircase 5



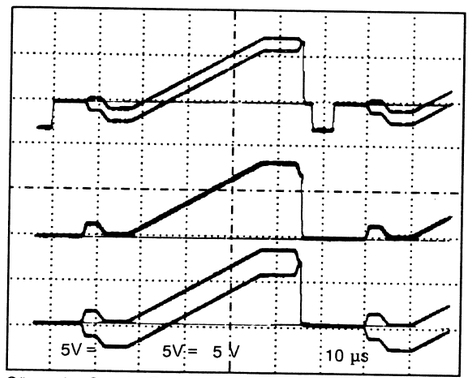
Lineartreppe/Staircase 5 St.
+ Sc 280 mV_{ss}/V_{pp}



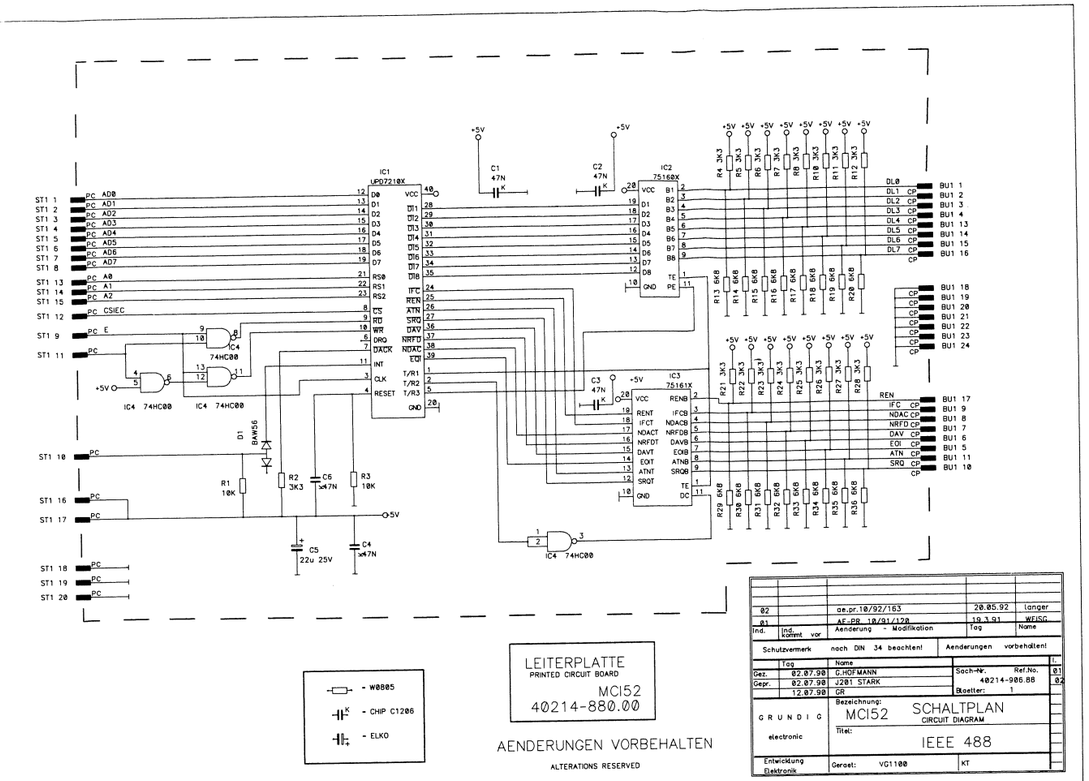
Lineartreppe/Staircase 5 St.
+ Sc 280 mV_{ss}/V_{pp}

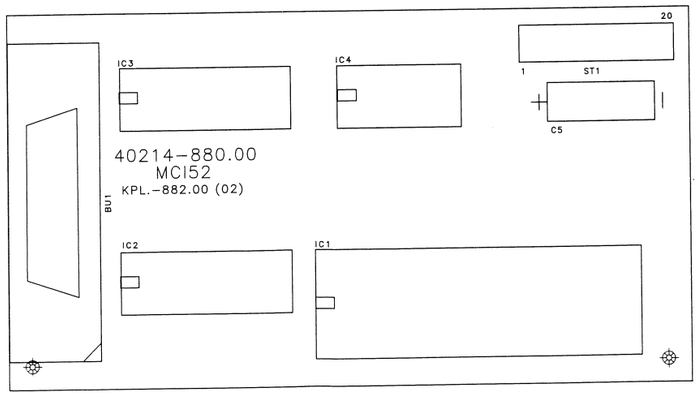


Sägezahn Spezial/Sawtooth special
+ Sc 280 mV_{ss}/V_{pp}

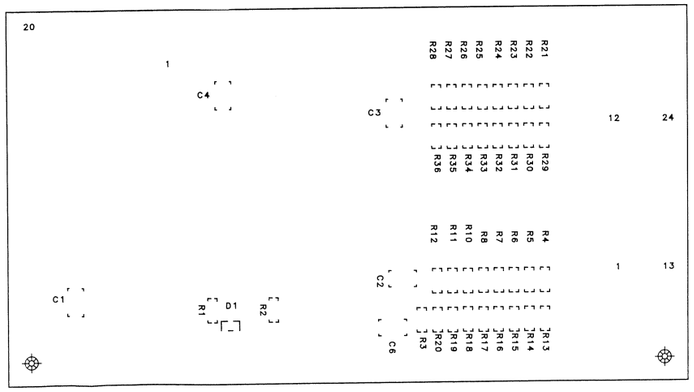


Sägezahn Spezial/Sawtooth special
+ Sc 280 mV_{ss}/V_{pp}





Bestückungsseite / Component side



Lötseite / Soldering side